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# A HISTORY OF PHILOSOPHY

*Revised Edition*

VOLUME ONE

BY

B. A. G. FULLER



NEW YORK

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## PREFACE TO REVISED EDITION OF *A HISTORY OF PHILOSOPHY*

I have revised my *History of Philosophy* at the request of my publishers, who have made it because of the numerous criticisms and suggestions for improvement provoked by the earlier edition. These have been sent to me, anonymously, of course, to give me an idea of the faults found with the first edition, and of the ways proposed for bettering it, especially for classroom use. I expected to find them helpful in the work of revision, but this hope has been disappointed. The universal opinion that the *History* should be condensed and broken into more chapters and sections, I already shared. But when it came to specific advice regarding improvements, I found that the criticisms and suggestions largely canceled one another out, and left me still in the dark and to my own devices as to what to do.

For example, although everyone felt that the book as a whole should be made much shorter, almost everyone complained that some philosopher or philosophic movement had been slighted and wished some chapter or chapters to be lengthened. And with two exceptions, which I shall mention in a moment, there was almost complete disagreement as to what should be given more space. Again, I was taken to task, on the one hand, for including too many lesser lights, and, on the other, for not including more. In short, almost everyone was insistent that I should rob Peter to pay Paul, but none could agree as to which was which.

The quality of the various chapters proved also a bone of contention. One critic, for instance, found the chapter on Spinoza "comparatively lucid and gratifying"; another said it "is not well organized and does this thinker a disservice." Again, while one wished the chapter on Christian philosophy expanded, another found it so bad that he felt it had better be omitted altogether unless completely rewritten in the light of a sympathetic and intelligent reading of the original sources. With the exception of the dropping of the demolition bomb above-mentioned, the chapter drew no fire save for a couple of suggestions for a clearer exposition of the controversy over universals and the doctrine of substantial forms.

Enough, however, to constitute a quorum voted for a more extensive account of the Pre-Socratics and of dialectical materialism and the Marxian theory. Indeed, one critic was so dissatisfied with my meager coverage of the Pre-Socratics that he wondered whether it might not be attributable to a desire on my part not to displace Vol. I of my *History of Greek Philosophy* which deals with early Greek thought at length. And the others, without invoking the economic interpretation of history as a possible explanation of my shortcomings, were equally insistent that the exposition should be lengthened. This I have done, not only because I agreed with them that more space should be given the period, but because I felt that the discussion of the Pre-Socratics in the present edition, as well as in the first volume of the *History of Greek Philosophy*, was in many respects incorrect. I have also enlarged the exposition of dialectical materialism and the Marxian theory. In addition I have revised and added to the discussion of Nietzsche, whom I felt I had treated inadequately. There were also one or two suggestions that I ought to amplify the account of personalism, particularly in its European phases. This I have done. I have, however, held it within the restrictions imposed upon both this and the earlier edition and mentioned no living thinkers.

Since it was obviously impossible to make the revised *History* all things to all teachers of philosophy and to suit everybody's taste, I decided to proceed as follows. All material errors in the old book I would, of course, correct. Since everybody, including myself, agreed that the *History* should be condensed and broken up into more chapters and sections, I would, with the exceptions just noted, ignore all appeals for lengthier exposition of this or that philosophic system or epoch. Under no circumstances would I carry the *History* further into the present or include any philosopher not already touched upon. In abbreviating it I would, however, take into consideration all the specific suggestions as to what should be shortened. Also I would even condense some chapters certain critics wished lengthened. But that I would do only incidentally to a final improvement of the book as a whole. Throughout the text I would, of course, try further to accentuate the clarity of my exposition as well as to improve the writing as a whole where possible.

In reading over the data at my disposal I soon began to suspect that what some of the critics most disliked about the book was myself. There were complaints that I was unsympathetic, that I played favorites, and above all that I betrayed the fact that I found some episodes in the history of philosophy amusing and treated lightly and even

flippantly those that amused me. Therefore, out of deference to these critics I have tried to expurgate the text of all comments, interpretations, and opinions of my own. Particularly I have endeavored to suppress all expressions of the amusement I get from the philosophic spectacle. I have tried, in short, to go the Cheshire Cat one better and to fade from the scene without leaving so much as the trace of a smile—or a frown—behind me.

I do not, of course, claim complete success in this effort. Every philosopher has his particular bias, which cannot but distort and accent somewhat his survey and account of the history of human speculation about the nature of the Real and of man's place in and attachments to it. My bias is naturalistic—and I probably cannot prevent a certain after-image of naturalism persisting even if the smile and the frown have disappeared. I hope, however, that, all things considered, the revised edition of the *History* will be found a much improved text for classroom use.

In conclusion I wish to thank Mr. John W. Weber for his careful reading of the galley proof, and also Mr. Emerson Buchanan for his final proofreading of the page proof. I am also most grateful to Professor Hunter Mead of San Diego State College, who not only has read the galley proof and made many helpful suggestions for the improvement of the text, but has also overhauled and expanded the bibliography that appeared in the earlier edition of the *History*.

B. A. G. F.

Tasco, Gro.  
Mexico,  
March 15, 1945.



## INTRODUCTION

### I. WHAT IS PHILOSOPHY?

**Meaning of the Term.** The word "philosophy" has from the beginning been loosely used. Apparently it, or rather the word "philosopher," was coined, or at least first given publicity by the Greek philosopher Pythagoras, in the sixth century B.C., who spoke of himself as a "philosophos" or lover of wisdom. After that, we find the term and its derivatives knocking about in everyday Greek to indicate a love of thinking about things and the possession of a thoughtful and reflective attitude towards life in general. This incidentally is the popular significance of "philosopher" and "philosophy" today.

It was Plato, however, who gave a specific and technical meaning to words of this group, when he described the "philosopher" as one whose attention was fixed on reality rather than appearance and whose characteristic interest lay in grasping the essential being and nature of things. Since his time "philosophy" in its widest and broadest sense has meant *a reflective and reasoned attempt to infer the character and content of the universe, taken in its entirety and as a single whole, from an observation and study of the data presented by all its aspects.*

**Inconclusiveness of the Subject.** We may say at once that this attempt has never succeeded in reaching a conclusion upon which all philosophers agree. The total nature of the universe remains an unknown quantity—a mystery—and no satisfactory piecing together of even those aspects of it with which we are acquainted has ever been accomplished. There always have been, are now, and probably ever will be, a number of opposed philosophic systems in the field, each one claiming that it makes more sense than the others. We must not, however, assume from its inconclusiveness that the history of philosophy is simply an account of one vain speculation after another—between which no connection can be established and in whose sequence no progress can be discerned. For a number of reasons it does not revolve in a circle, but revolves in a spiral.



**Nature of Philosophic Progress.** In the first place, the evidence at hand upon which systems are based is always being enlarged by further exploration and more detailed analysis of every aspect of the world. The human intellect may, indeed, be no keener than it was twenty-five hundred years ago when European philosophy began in Greece. But it certainly has today not only much more material to work with than had the Greeks, but also a material that has been more thoroughly sifted and is better understood. Consequently, philosophic speculation today has at its disposal the results of a completer exploration, both telescopic and microscopic, so to speak, of every aspect of the universe, including the phenomena of human life.

Again, there has been a steady improvement in organizing philosophic procedure. Techniques have been developed and clarified. Fields of investigation have been more accurately mapped and delimited. Above all, the human mind and its powers, limitations and idiosyncrasies have been scrutinized with greater care and efficiency. Then, too, philosophy is always learning from its own accumulating history; negatively, from the pitfalls into which it has fallen and the blind alleys up which it has turned in the past; positively, from suggestions in earlier speculations that can be followed up and utilized in the development of new hypotheses. Hence it has become increasingly better equipped, not only to examine the case presented by the universe and to detect new symptoms, but also to diagnose what it finds.

**Everlasting Disagreement.** Future philosophers will doubtless be much more skilled in both these respects than we are. Nevertheless, it is doubtful whether their diagnosis of the situation with which they will be confronted, five or ten, or twenty thousand years hence, will be any more unanimous than ours is today. Probably philosophy must expect to the end of human time to find its doctors disagreeing. But this means that, in growing, it will never grow old, and that it will continue to exasperate, delight, and tempt the human mind as long as man exists.

## II. WHY DO WE PHILOSOPHIZE?

But why should speculation about the nature of the universe perpetually fascinate us? Why should "all men naturally desire to know," as Aristotle puts it in the opening sentence of his *Metaphysics*? To attempt to answer this question, at least to the extent that we are here concerned with it, we may note that this desire is complex and

has its sources in two somewhat different groups of human interests which we may call the *practical* and the *contemplative*, or we might say, the *self-centered* and the *self-transcending*. By "self" we mean here not the individual but the race. Both groups are of course *self-centered* in the sense that both have their sources in human nature, satisfy human nature, and constitute a human point of view. But, as we shall see in a moment, their objects and their satisfactions differ so much that we may contrast them. At the same time, in disentangling and contrasting them for the purpose of analysis, we must always keep in mind that in our thought and our action they are inextricably intertwined. Let us now discuss all this more in detail.

### III. THE PRACTICAL INCENTIVES TO KNOWLEDGE

**Human Betterment.** Man, like the other animals, has to struggle for existence, and survives, like them, by both adapting himself to his environment and his environment to himself. But whereas they have a limited capacity for manipulating their surroundings to suit their special needs and desires, he has developed it so greatly that we may almost call it a distinctively human characteristic. Consequently a large part of our *practical activities* are devoted to *bettering* ourselves and our place in the world, and this not only by preserving, but by constantly expanding and enriching our life—something which the other animals seem unable to do.

Furthermore the development of man's power of imagination has enabled him to translate his natural drives and desires into fixed and detailed pictures of a world that would be congenial to them. Hence, his capacity for improving the human situation in the world, which would otherwise find only hand-to-mouth and hit-and-miss expressions, becomes guided by *definite ideals* and *fixed purposes*. These supply the motive power and the directives of the evolution of the *social, economic, and moral orders*, and of the *applied sciences* that serve them.

**Natural Limitations.** But this power of man to alter, improve, and enrich both his environment and himself is exercised within limitations to which his practical activities have to submit. Much of this adjustment of himself to his own fixed organic structure and to a fixed order in the external world is frictionless and satisfying. The universe brings him into being, and permits him to live, and to live happily, within the limitations it imposes upon him. It is in part friendly to him, and abounds in much he finds beautiful and good,

and it presents itself to him as an object of religious experience from communion with which he draws a profound satisfaction and peace. At the same time the universe does not seem *wholly* or even, it may be, *intentionally* friendly to him. Many of the limitations imposed upon him by his own make-up and that of external nature not only retard and often positively obstruct the realization of his ideals, but inflict pain and disaster upon him and are a constant threat to the continued existence both of the individual and the race. Hence much of man's adjustment of himself to nature, and of nature to himself, is a laborious and disagreeable process with which he is dissatisfied, against which he rebels, and which he seeks to circumvent.

**Imaginary Ideal Worlds.** Once more, however, imagination comes to his rescue. Although his practical activities cannot overcome and abolish the harsh limitations that distress and defeat him, his fancy can. Not only can he picture goals that his practical activities can actually achieve within the fixed frame of the apparent nature of the universe, but he can also dream of a universe remade according to the heart's desire, freed from what he finds evil, and wholly in accord and even actively sympathetic with his vision of human perfection. And in imagination he can substitute the universe he wants for the universe he has on his hands. Of this universe his art and his religion are two great prophets. Art seeks to repicture the face of things in such wise that its features are wholly beautiful. Religion in its highest reaches remolds the heart of things in forms expressive in various and widely different ways of the peace religious experience brings and of the support man finds in it for his pursuit of human good.

But man can go further than dream about the better world suggested by esthetic and moral and religious experience and depict that dream in moral vision, and art, and articulate religion. He can also attempt to *think* such a world into existence. After all, the universe as it appears, seems also to be not the whole universe, or even the real nature of as much of it as lies within his ken. May it not be, then, that if only he could *know* everything there is to know about the world, he would find that its harsh and restrictive aspects are only seeming? Might he not find that the wholly good and beautiful universe of which he dreams, responsive in all respects to moral and religious aspirations, is really the *true* universe as well?

**Avoidance of Useless and Disagreeable Knowledge.** Now it is under such auspices, as instruments of survival and betterment, and as means to perfecting the world and making our dreams come true, that the

human need and desire to know have in large part been evolved. Therefore it is not unnatural that in everything pertaining to man we tend to ignore and even to despise knowledge that is not of practical use and *good for something*, and that cannot be immediately *applied* and *utilized* in securing and improving the human situation in the world. Nor is it unnatural that in theorizing about the true nature of the world, man should also be not only inclined to ignore and disparage any knowledge which suggests that the universe is not as he desires it to be, but inclined as well to resent and condemn such knowledge as "disillusioning" and dangerous to his happiness, and to dismiss it as short-sighted and fallacious.

#### IV. THE BASES OF DISINTERESTED CURIOSITY AND CONTEMPLATION

**Curiosity.** But this is only half the story of our natural desire to know and of our dealings with the world. The other half has to do with a human characteristic that differs widely in some respects from the interests we have just been describing. This characteristic, which man shares with many other animals and perhaps particularly with the anthropoids, is *inquisitiveness*. Man is endowed with an insatiable curiosity.

In the lower animals curiosity seems to be associated almost entirely with special interests and occasions, to explode in puffs of activity, and to come and go by fits and starts. Man, however, has developed over and above these intermittent curiosities a *sustained general curiosity*, which is excited by no particular occasion but by any and every occasion. Though a valuable instrument of survival and betterment, it is such only incidentally. It exercises itself simply for the sake of the satisfaction it gets out of just poking and prying about in the universe at large, and from just contemplating whatever it may unearth.

**Satisfactions of Contemplation and Explanation.** It displays and realizes itself on two levels, so to speak. In the first place, it is interested in *surveying* the content of all space and time; in watching equally what is taking place on earth and in the outer galaxies, and in reconstructing from its findings the past and perhaps in forecasting the future both of the race and of the universe. Secondly, it is insatiable in its desire to *explain* things, to co-ordinate the whole content of space and of time, so that the procession of events which constitutes the world-process shall fall into as *intelligible* a pattern as possible. In a word, if our practical and moral interests are always

asking "what good is it?" our general curiosity is always asking "what is it?" "why is it?" "what makes its wheels go around?" We naturally desire not only to *better* the world from the human point of view, but to *understand* it as it is.

Were it not for this characteristic of *general curiosity*, it is doubtful whether we should wonder much about things or speculate very persistently about the nature of the Real. We should probably rather live happily by satisfactory rules of thumb learned from experience, without bothering to inquire into the *reasons* for their validity. For that matter, we should probably take no interest in *explaining* anything at all. It is interesting to note in passing that had the line of our evolution been feline rather than simian, *general curiosity* and philosophic speculation would very likely be almost non-existent. We should be purring rather than prying our way through life, making the best of the world as we found it, and letting it go at that.

**General Curiosity Disinterested.** Now, *general curiosity*<sup>1</sup> has features that are disconcerting to our special, human, moral and religious interests and to our tendencies to *think* in accordance with them. In the first place, it can be exercised without ulterior motive, and without practical goal, or moral end in view. Just the activity of exploration and explanation is enjoyable in itself, irrespective of what it discovers. Secondly, our *general curiosity* is not interested in the practical and moral bearings upon human life of its subject-matter, its investigations, and its findings. It feeds equally upon what we consider desirable and undesirable, good and evil, sin and sanctity, and finds them all equally palatable. Although its findings may prove useful in promoting the one and abolishing the other, it is not concerned with their possible uses. It is dissatisfied only when it cannot size up a situation, and it is satisfied when it feels it has sized it up. Plainly, then, in so far as we are actuated by general curiosity and nothing else, we are quite indifferent to the moral and religious results of our speculations. All that matters is that our curiosity regarding the nature of the universe should be satisfied by *making sense* of its behavior.

**General Curiosity and the Pure Sciences.** Just as our special, centripetal activities animate and direct our practical and moral life and the reflection of that life in religious experience and vision, so our centrifugal, roving, *general curiosity* animates and sustains what we may call the *theoretic* exercise of the intellect in a disinterested pursuit

<sup>1</sup> I am indebted to Lundholm for the terms *special interests* and *general curiosity* and for suggestions as to the relations between them.

of what we call *true*. Without *general curiosity* there would be no dispassionate scientific and philosophic inquiry, no *pure* science, no pursuit of learning for its own sake, no voyages of intellectual, or for that matter of geographical discovery, undertaken in the spirit and for the sake of sheer adventure. There would be no historians, no ethnologists, no archaeologists, no "ologists" at all, no higher mathematicians, no ultra-physicists, probing the constitution of the physical world, no astronomers sweeping the outer reaches of space through their telescopes—all for the joy such research brings. Nothing would be pursued beyond the point where it ceased to pay cash dividends of immediate usefulness, and there would be no enrichment of human experience over and above that which can be measured in terms of practical utility, social adaptation, moral uplift, and somewhat earth-bound spiritual consolation.

Imagination, too, could do no more than flutter and falter, if it had not general curiosity to unfold its wings, to expand its horizon and its ceiling, and to sustain it in its flights.

**General Curiosity and Art.** For that matter, there might be no art, for art is the re-picturing of nature in objects created for the mere satisfaction of contemplating them, or at least, in the case of objects created primarily for utilitarian purposes or for moral and social propaganda, it adds to their functional aspects a capacity for affording this satisfaction as well.<sup>2</sup> To be sure, esthetic and intellectual enjoyment are not identical, since our *general curiosity* may take pleasure in exploring and sizing up situations that are esthetically uninteresting or even distasteful. But art shares the indifference of our general curiosity towards the practical and moral desirability or undesirability of its subject-matter. It is concerned only with dramatic and esthetic possibilities and with their elucidation for the sole purpose of pleasurably contemplating the result; just as pure science is concerned only with the intellectual problem presented by a given situation, and with a solution with which, however much it may disappoint us morally, our curiosity with respect to that situation will be satisfied. In short, the peace that is given by the contemplation of beauty, like that which attends the contemplation of truth, is neither given nor taken away by ethical approbation or disapproval.

No other animal, so far as we know, creates objects just to look at them or listen to them—although the ants, we are told, treat some of

<sup>2</sup> Cf. Lundholm's interesting discussion of the relation of art to general curiosity, *The Aesthetic Sentiment*, Ch. IX.

their domesticated insects in a contemplative rather than a practical way, getting no apparent use from them save the pleasure of having them about. Indeed, if I am not mistaken, some entomologists have suggested that the ants must either keep them as pets, or venerate them much as part of mankind venerates sacred animals.

#### V. THE INTERWEAVING OF PRACTICAL AND CONTEMPLATIVE ACTIVITY

We must not think, however, that our disinterested curiosity about things as they are and our special human interests in having things as they are also as we want them to be, flow side by side in our minds as two separate and distinct currents. On the contrary, they are intermingled to the extent of confusion in all our behavior and all our thinking. Curiosity may be occasioned, and its indulgence may be directed, by practical and moral needs; and, even when aroused and indulged with no ulterior, practical motive, it may generate by-products that contribute greatly to practical and moral improvement of the human situation. Much of our applied science has come into existence in this way.

**Action a Means to Contemplation.** Conversely, our practical activities may be regarded and used as means to ensuring an opportunity for the indulgence of disinterested curiosity and contemplation. Certainly we *act*, economically, socially and morally, in part at least, for the purpose of achieving the conditions necessary to surveying and enjoying, as spectators, the panorama and the plan of all time and existence. Furthermore, practical activity may be enjoyable in itself. In that case it becomes in a way an object of contemplation, in the mere experience of which we come to rest, without seeking further justification for it—just as we do when we have satisfied our curiosity.

Thus the scientist deliberately bent on benefiting humanity satisfies incidentally his general curiosity at the same time. Or, whatever our particular "practical" job in life may be, we may love it just for itself, irrespective of what it pays us or of what service it may be to society. Indeed, if we could not suffuse our everyday work with a contemplative enjoyment of it for its own sake, purified of all pre-occupation with the service it may render practical and moral ends, it would be mere drudgery, worthless except for its results. The same suffusion keeps moral endeavor from becoming self-conscious and self-righteous. Life would indeed be a dreary and priggish affair, if everything we did had to be done consciously and deliberately from a worthy motive

and with a worthy goal in view, and never could be justifiably contemplated and enjoyed as an end in itself.

Religion, too, besides being a way of practical and moral living directed by the ideal of the human good and aimed at its attainment, is also contemplative, and its satisfactions are akin to those of our general curiosity. For, in the first place, the mere presence of its vision, like the presence of what strikes us as beautiful, and of what we suppose to be true, brings peace and contentment, quite apart from its possible practical applications. For that matter, just the presence of these visions is a partial solution of the problem of life for those who entertain them. In the second place, in so far as these visions are regarded as *explanations*, and as religion claims to be *intelligible*, they must be satisfactions of our general curiosity as well as of our spiritual aspirations.

**Fusion in Thought of Truth and Goodness.** This brings us to our final point—that in our conscious thinking and philosophizing all the component drives of our desire to know are so fused that we are scarcely aware of a possible antagonism between them. Undoubtedly we want to find *true* what we find *good* in other respects, and conversely we cannot find an interpretation of the universe wholly *good* unless we believe it to be *true*. Indeed, minds dominated by moral and religious insistencies go so far as to regard the satisfaction of these demands as a positive sign of truth, and to feel that any conclusion that defeats their realization must by that very token be false. On the other hand, a mind dominated by curiosity feels that moral and religious ideals and concepts, however lofty, are not only untrue but also bad religion and bad morals if they do not make sense in its eyes. And a thinker so minded seems to accommodate without friction his ethics and theology to whatever hypothesis seems most plausible in the light of disinterested investigation.

**Internal Unity of Philosophic Systems.** In no case is there much creaking and groaning within a philosophic system. It is generally so completely lubricated throughout either by disinterested curiosity or by our special interests, as the case may be, that in the mind of its author its parts all glide into place, and fit together, and click smoothly and noiselessly, so that either what looks good seems true, or what seems true looks good. No thinker proclaims his philosophy to be profoundly acceptable in the one respect, profoundly unacceptable in the other. On the contrary, whatever his interpretation of the universe may be, every philosopher shows every sign of getting an all-round.



even satisfaction from it as a whole, and of being quite at peace with and within himself. But he may be and often is at war with other philosophers. To this conflict we now turn.

#### VI. WHY PHILOSOPHERS DISAGREE

**Temperamental Bias.** The investigation of the desire to know has shown us that the continued accumulation, both telescopic and microscopic, of new data for the mind to reflect upon is not the only reason for the disagreements regarding the nature of the universe which have agitated philosophers since the beginning. We have now to add other reasons internal to the human intellect. Chief among these is the inevitable bias, with which thinkers of different temperaments, differently conditioned by education and environment, undertake the task of interpreting the behavior of the world. The deepest cleavage seems to be between those who are on the whole inclined to be swayed in their thinking by disinterested curiosity and those who are inclined to be governed on the whole by moral and religious motives. Indeed, as we shall see in a moment, philosophers may be roughly grouped according as they stand squarely, or at least have the balance of their weight, on the one foot or the other.

**Conflicting Moral and Religious Preferences.** But this is not all. The inclination to interpret the behavior of the universe in a fashion favorable to human moral and religious interests is itself torn by disagreements as to what kind of universe would be morally and religiously the most desirable sort for human beings to live in. For that matter, people are quite as much at loggerheads over what is really good and really divine as they are over what is true—witness the conflicting theories of how human life should be lived to the best advantage, the varieties of religious experience, and the different kinds of gods these varieties suggest. If, then, the universe is to be morally and divinely ordered and governed, in accordance with whose moral ideals is it to be directed, and in the image of whose religious craving is the divine to be conceived? We must therefore supplement a general bias towards interpreting the world along lines suggested either by curiosity or by our special interests, with a host of particular preferences reflecting individual variations of moral and religious aspiration.

The universe itself smiles inscrutably upon the confusion its presence inspires in the minds which are part of it. At any rate, it has dropped them no prior hint, by way of logical possibility or impossi-

bility, as to which bias, if any, is correct. There is no *logical* reason why a universe should not completely satisfy both our general curiosity and our special interests. A universe morally and divinely ordered for the good and happiness of mankind is quite conceivable. It contains no self-contradictions and might just as well exist as not. The same is true of the innumerable universes reflecting the varieties of religious and moral preferences. There is no *logical* reason against the existence of any one of them or against its satisfying our desire to know the truth about things, unless it contains some internal absurdity.

But, on the other hand, there is no *logical* reason why a universe *should* satisfy our moral and religious aspirations—or the aspirations of one moral or religious system rather than another. A universe indifferent, or partially hostile, or even wholly antagonistic to individual or racial human preferences, is quite conceivable. It, too, contains no self-contradictions. It might just as well exist as not, and it might satisfy our general curiosity quite as completely.

**The Nature of Things Inferred from Their Behavior.** Deprived, then, of any hints, in the shape of *a priori* necessities of thought, as to whether and to what extent and in accordance with whose views the universe is or is not morally and divinely constructed, our minds are thrown back upon an observation of its actual behavior as the only base upon which to build and verify philosophic hypotheses. This, however, is not without its compensation, since it frees our special interests from any *logical* obstacles to having the universe as they wish it, as long as their hypotheses regarding its nature are not internally self-contradictory and therefore self-stultifying.

Again, the evidence is such as to permit at least the hope that the actual universe may be one of the many possible ones upon which the various moral and religious aspirations of different individuals and groups have set their hearts. The world, as we have already pointed out, shows us great kindness in many ways. Much of it comes ready-made in patterns that seem good and beautiful and divine to human eyes. The only difficulty, then, that stands in the way of philosophic hypotheses satisfactory alike to our general curiosity and our special interests arises over the answer to be given to the following question. We must ask ourselves whether, and to what extent, and how, the seeming indications that the universe is also in many respects *indifferent* and even *hostile* to human moral and religious aspirations can be made *intelligible* on the supposition that in reality it satisfies them. It is over this point among others that the philosophies dominated by curiosity and by our special interests part company.

Incidentally, this divergence would occur even if all human minds agreed that the behavior of the universe could be made intelligible on the supposition that it is morally and divinely ordered and governed. For in that case general curiosity would be called in to arbitrate the dispute between the adherents of different moral systems and different religious experiences and theologies, by deciding whose views were more *credible*—that is, more satisfactory to curiosity itself. And each different moral and religious point of view would *argue* that it alone satisfied general curiosity, and each would reject similar arguments on the part of the others.

**Most Systems Dominated by Special Human Interests.** The majority of the systems we are about to study are motivated by our special interests. They are attempts to reconcile the observed behavior of the universe and the inferences our disinterested curiosity, if left to itself, might draw from it, with the hypothesis that the world is constituted and governed, in whole, or at least in part, in accordance with those interests. They are quite frankly anthropocentric and anthropomorphic and display much energy and ingenuity in defending and justifying their point of view. The history of philosophy is in large part the chronicle of an unrelenting struggle to bring within the same focus the good, the beautiful, and the true, and to contemplate them all as a single, self-consistent, all-explanatory object in which all our aspirations, including our yearning to satisfy our curiosity, find equal and complete fulfillment.

That this should be the case is not surprising. Our moral and religious preferences, like our other special interests, reflect the fundamental organic impulse of every form of life to preserve and perpetuate itself at all costs, and to behave as if it were the sole form that mattered in the universe and the only measure of good and evil. Man would not exist unless, in all his active and practical relations with the world and in the ideals generated by them, he were implacably anthropocentric and determined at all costs to have the world as *he* wishes it to be. We might expect, then, to find this determination gritting the teeth of his philosophizing as well, and spitting out as false and illusory whatever is too hard or too harsh for them to crack.

**Some Systems Dominated by General Curiosity.** However, in some cases the urge of general curiosity is so strong as to discount rather than reinforce the claims of the special interests, and as to permit their indulgence only within the limitations imposed upon them by its disinterested findings. So it is that there has also been a persistent

philosophical minority, predisposed by temperament, education, environment, etc., to take its stand neither here nor there, but, as it were, everywhere, for viewing existence and for seeking to make out its pattern.

This minority tends to decentralize the universe in its thinking, and to find *all* aspects and events equally interesting, equally important, and equally deserving of attention, and equally valuable sources of information regarding the nature of the Real, no matter how they affect our special interests. To this minority, human life and its attachments to the universe are one phenomenon among others to be impartially studied and appraised. The place of man in the scheme of things is not to be determined by *a priori* assumptions of centrality and special importance shared with, and incidentally contested by, all other living beings. It is rather to be determined by the position that the total context of events in which man occurs, and the total behavior of the universe towards him, seem to assign him.

Starting from a point of view that discounts man's pretensions to be a center or an apex, pending at least further investigation of these claims in the light of the total situation, the minority finds unsatisfactory the arguments brought forward by the majority for exalting him to such a position. It has contended from the beginning that the behavior of the universe, dispassionately considered, will not admit of an interpretation agreeable in all respects both to our desire to know the truth and to our desire to have the truth what our special, human interests would like it to be. It charges the majority with ignoring, or suppressing, or *explaining away* instead of explaining, such evidence as does not bear out their hypotheses. In a word, it finds that these hypotheses are, in a phrase of Dr. Kallen's, "compensations in discourse for disappointments in experience," rather than intelligible *explanations* of why these disappointments occur.

**Conflict between Satisfaction of Curiosity and of Special Interests.** The majority retort, not unnaturally, that only the existence of what would satisfy our religious and moral needs can possibly explain them:—to which the minority replies that this is another assumption, like that of man's central position, which must be tested by taking into equal account all that makes against it as well as what makes for it, and by weighing the *pros* and the *cons* as impartially as possible. If those aspects of the universe that suggest its being morally and religiously constructed are to be taken at their face value and regarded as *prima facie* evidence of the nature of Reality, then those

aspects that might seem to indicate the contrary must be given equal weight—or lack of weight—in influencing our conclusions. And, whatever our conclusions may be, we should be as ready to accept the bitter in them as we are to embrace the sweet.

This dispute, which excites deep-rooted human passions and emotions and involves man's right to extend in theory the self-importance he must practice if he is to survive and progress, naturally expresses itself in invective as well as argument. It has been especially acrimonious in modern philosophy. For only since the time of the early Christian philosophers have our special human interests insisted that both the *existence* and the *total behavior* of the *whole* universe must be *completely explained* in terms *entirely* satisfactory to them. Ancient philosophy, with the exception of the Stoics, permitted the disappointing aspects of the world to be explained by ultimate factors in the nature of things that were *really* obstructive to a complete moral, rational and divine government of the world. Consequently it found the problem of reconciling the satisfaction of our special interests with that of our general curiosity less difficult to handle. At the moment, it looks also as if the contemporary philosophies dominated by our special interests were becoming less exacting in their demands that the Real should *completely* support and satisfy our human preferences as to its nature.

**Permanence of the Conflict.** We may expect temperamental differences among philosophers to continue till the end to divide them along the lines we have been discussing. We may expect, also, that philosophies inspired and directed by our special interests will always be in the majority and will have the upper hand in human thinking. But we may believe that a minority of thinkers, instigated and guided by general curiosity, will also persist, and will continue to dispute the conclusions of the majority.

We must remember, too, that just as the evidence from which our conclusions are drawn is always accumulating and changing, so our special interests may also be expected to change in response to altered practical conditions—as indeed they have changed in the past. Different economic, social, moral and religious interests and preferences have come and gone, creating in their transit the ideal worlds they demanded that our curiosity should disclose and verify in the actual world of their experience. And so we may expect it to be in the future. Moreover, however they may change and whatever they may be, the special interests and preferences of different individuals and groups

will go on fighting with one another and with general curiosity over the question of which is to have the say in interpreting whatever the evidence is at the moment.

## VII. PHILOSOPHY AND THE SPECIAL SCIENCES

We are accustomed to think of philosophy as a kind of clearing-house for the reports of the various sciences, whose business it is to analyze, criticize, and combine the information they turn in, smoothing out, as best it can, the contradictions in and between their conclusions, and filling in the gaps with surmises of its own as to how they hang together. For example, how are we to dovetail the description of the physical aspects of the universe given by the physical sciences, with the results of the study of its mental aspects by psychology? To answer this question is one of the major tasks of philosophy.

**Origination of the Sciences by Philosophy.** This may be the relation of philosophy to the sciences today. But to think that such has been the case from the beginning, and that philosophy has been developed out of the sciences, and has been built up on bases provided by them, is to reverse the original and, in a way, still essential relation between them. Man began by dealing wholesale with the world. In the beginning he faced the universe *en masse*, wondered indiscriminately about all those aspects of it that most struck him at the moment, and indulged in speculations about both its general nature and behavior, and the nature and occurrence of particular events, without separating "scientific" and "philosophical" fields and methods of investigation from one another. We shall have occasion to remark this again and again in the next few chapters.

It was only as this original, massive wonder about the world as a whole began also to be engaged by and directed upon different groups of events, that the spirit of universal inquiry subdivided into specialized investigations devoted to fields of research deliberately set off from one another. Then, one by one, the special sciences, like runners from a parent plant, slowly took root for themselves and became independent and self-supporting. Only, they have never severed their connection with their original source, but have kept sending back to feed it part of the nourishment they take from their various fields. And conversely philosophy, in its turn, still makes valuable suggestions to the special sciences.

**Progressive Separation of the Sciences from Philosophy.** Astronomy and medicine and logic set up for themselves at a fairly early date, whereas physics and chemistry did not take firm independent root until after the Renaissance. And it is only in our own day that psychology has ceased to be a branch of philosophy and, freed from prior metaphysical hypotheses regarding the nature of consciousness, has made a separate science of the study of that subject-matter. Research, however, *into human relationships would seem to be still mixed to some extent with philosophical speculations, and to be largely at the mercy of emotion and passion and prejudice, although we have begun to speak of the social sciences.* Ethics, for example, is particularly under the influence of metaphysical theories. But we are already talking of a *scientific* ethics, and moving towards standards and directives of conduct based upon independent investigation of the field of human behavior rather than upon philosophical and other preoccupations with it. So, too, attempts are being made to work out a science of economics and a science of sociology. It may be that in the future these infant sciences will attain to the same detached status as the physical sciences enjoy, and instead of being unduly influenced by antecedent presuppositions, will begin, not only to furnish scientific data for philosophic meditation, but also have some effect upon human conduct.

## Chapter II

# THE RELIGIOUS AND ETHICAL BACKGROUND OF GREEK PHILOSOPHY

### I. GENERAL CHARACTER OF GREEK RELIGION

As we have seen, religious interpretations of the appearance and behavior of the universe, and reflections upon human happiness and the best way to attain it, precede, as a rule, philosophic speculation, and play an important part in molding it. Hence it will be well for us to examine briefly the characteristic Greek religious and moral atmosphere in which Western philosophy drew its first breath and uttered its first cries.

**Absence of Heresy in Greek Religion.** By way of introduction, we should mention the almost complete absence of *heresy* from Greek religion. This was due in part to the fact that the Greeks had no powerful and well organized and entrenched clergy, and no definitely formulated creeds. They looked to Homer or Hesiod, to be sure, for information on points of theology, but they did not regard them as divinely inspired, or consider their accounts to be last words on the subject.

Furthermore, as we shall see in a moment, the Greek gods were so conceived that philosophic speculation, unless it denied their existence, could not easily offend religious sentiment. A profession of atheism or agnosticism, or even the suspicion of worshiping other than the Olympian deities could, and for a while did, get philosophers into difficulties and even danger—particularly at Athens, which was religiously conservative. But in the Greek cities in Asia Minor, and Sicily and southern Italy, where philosophy first appeared, a considerable freedom of religious and irreligious thinking seems to have existed from the beginning.

This was of great advantage to the rapid and untrammelled development of early science and philosophy. Their growth was almost entirely unhampered by the conflict with religious sentiment and



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belief, and by the repressions and persecutions, that were later to impede their progress. Nor was Greek religion itself divided by sectarianism and agitated by the bickerings and hostilities of opposed groups within its fold. The variety and richness of the godhead it adored and the temples and festivals built and celebrated in honor of this multiple divinity, gave everyone a chance and left everyone free to worship pretty much as he chose, without incurring the ire of his neighbors.

**General Characteristics of Greek Religion.** Passing now to the general characteristics of Greek theology, we may note the following points.

1. The idea of a gradual evolution of the universe was a commonplace of Hellenic religious thought. All the creation stories tell of a development by slow stages out of earlier, more chaotic conditions. The notion of a universe created out of nothing by the fiat of a divine will never occurred to the Greeks.

2. The gods were not regarded as creators of the world-process, or as directors of its course, but as products of it along with everything else. Nor were they brought into being in a completed state. They had a family tree, and rose generation by generation, as the world evolved. Even the Olympian deities, in which the divine genealogy culminated, progressed and grew wiser and better and more civilized, as the world in general became more stable and more orderly.

3. The gods were always part of a larger scheme which allotted to them their places and limited their powers. They were not regarded as omnipotent or as omniscient in the modern sense of these terms. They simply had the power and the knowledge appropriate to their superior but not totalitarian situation in the universe.

4. Hence their relation to man was not so much that of creator and father as of elder brothers. Gods and men were alike children of the same mother, sharers of the same heritage, and members of the same family, as the poet Pindar sang. But to the gods alone nature had allotted easy and everlasting life. Deathlessness and carefree living were the divine prerogatives that marked their difference from men. For man to seek to become or even to dream of becoming as one of them, was to disobey the law of the universe and was insolence of the worst sort. "Seek not to become Zeus, mortal things befit a mortal." Though, as we shall see in a moment, there were movements in Greek religion that defied this warning of Pindar's, the idea that the universe imposes upon each form of being a *moira* or plot, or lot, within which

it must remain, and with which it should be content, is dominant in both Greek religious and ethical thinking.

5. **Kinship of Man and Nature.** In a universe so conceived it was natural that there should be little distinction between the animate and the inanimate. We have been accustomed to think of a universe, composed of dead matter and inhabited by a few living beings, which has been created out of nothing to serve as staging and scenery for the all-important drama of human life. But to the Greek mind nature was living and companionable through and through. All her phenomena could be interpreted in terms of human feelings and motives, and, in her physical laws, were subjected to moral restraints akin to those laid upon human beings in their dealings with one another and with the gods. Hence man found himself on a familiar and friendly footing with the whole of nature, at home in the world, and unabashed, self-respecting, and at ease in the presence of the divine.

It is very difficult for us with our conditioning to enter into this fellow-feeling for the universe. The imaginative child perhaps still enjoys it. And it has been suggested that it was, and for that matter still is, the attitude of the Pueblo civilization of the American Southwest. "The native American," we are told, "like the Oriental," and, we should add, like the early Greeks, "viewed nature as the great source of all existence, found in contemplating its orderly processes the principle for the ordering of his life, sought in its mysterious forces not something to be captured and made to serve him, but harmonies that he might share to the profound satisfaction of his soul."<sup>1</sup>

6. **Greek Religion Extroverted not Introverted.** A race so happily and completely at one with the rest of nature might also be expected to look outwards rather than inwards for its religious experience. Hellenic religion was essentially extroverted. It was not preoccupied with the inner life of man, and given to introspection and searchings of the soul, and to finding God by withdrawing from the world. The Greek was comparatively selfless, absorbed in the communal life of his city and in the larger social life of the universe. He had only to go out from himself and immerse himself in the divinity of external nature, to submit himself to her order and her laws, and to live the life she had ordained for human beings, in order to find his gods waiting halfway to meet him. Indeed, his language had no equivalents for such introverted terms as "person," "personality," "individual," the "self," "selfhood," "self-consciousness," the "ego," the "I," "conscience," and

<sup>1</sup> Hewett, *Ancient Life in the American Southwest*, p. 61.

the like, which figure so prominently in our modern religious and philosophic vocabulary.

7. Again, the Greeks did not ascribe to human life an undue importance in the universe. Greek religion, though anthropomorphic and accenting the humanity of the gods, was not anthropocentric. Man was only an incident in the larger life of nature. Human society was only part of the great cosmic society to which men and gods alike belonged. And the ascent and redemption of man was but an episode in a cosmic progress from disorder to order, from barbarism to civilization, in which not only human beings, but all things, even the very gods, participated.

8. **The Orthodox Doctrine of Immortality.** The idea of immortality played a small and not particularly agreeable part in the orthodox Greek tradition. To be sure, it was believed that the individual survived death, but the future life was a vague and shadowy affair—a flitting, bat-like, so Homer says, down into the dark house of Hades, of a shade bereft of wits and memory and everything save a pale flicker of life. All that made a man a man and life worth living was bound up with the body. Indeed, so drab and dull was the after-life that in Homer's story of the descent of the living Odysseus into Hades, the ghost of Achilles says he had rather "live on ground as the hireling of another, with a landless man who had no great livelihood, than bear sway among all the dead that be departed."<sup>2</sup>

## II. GENERAL CHARACTERISTICS OF THE MYSTERIES

**Pre-Olympian Deities and Cults.** Besides these "orthodox" aspects of Greek religion, associated with the cult of the Olympians, there were other currents entering into it, derived from a different source. *The Olympian gods, like the Greeks themselves, were late-comers in Hellas.* They accompanied the migrations of the invading tribes from the north who overran the country and conquered the earlier inhabitants. There they grafted themselves upon and became assimilated to the deities of the conquered race, whose religion seems to have been a primitive worship of the inexhaustible fertility of nature and of her recurrent cycles of life and death in the changing seasons. Its gods were gods who died and rose again from the dead, of whose divinity and death-defying essence their worshipers might partake by initiation and sacrament.

<sup>2</sup> *Odyssey*, XI, 489-491 (trans. Butcher and Lang).

The cult of these deities ran counter to the orthodox tradition, and broke down the barrier that separated the human from the divine, by enabling man to overcome death and even to become God. But in so doing it satisfied the desire for a happy immortality and the mystical yearning to unite with the godhead, for which Olympianism found little place. Moreover, whereas the orthodox tradition left man to work out his own salvation, the dying and the rising gods were saviors, who offered to those who joined in their worship divine aid in escaping from mortality and the limitations of human nature. Two of these cults were of special appeal and furnished material for two powerful and widespread religious movements which emphasized man's immortality and quasi-divine destiny.

### III. THE ELEUSINIAN MYSTERIES

First, there was the story of Demeter, goddess of the crops, and her daughter Persephone. Persephone was carried off by Hades, god of the underworld, to be his bride, and the sorrowing Demeter wandered over the whole earth in search of her. Meantime all vegetation died, winter descended upon the land, and man was about to die of starvation. Then the gods decreed that Persephone should spend half the year beneath the earth with Hades and half in the world above with her mother. Each autumn she descends to Hades, leaving death and desolation behind her, each spring she rises, bringing greenery and warmth and life.

An important cult of these goddesses had established itself at Eleusis near Athens in the seventh century B.C. After Eleusis was annexed by Athens this cult became part of the Athenian state religion, and finally pan-Hellenic in its scope. Its power lay in the promise of a happy immortality, far away in the Islands of the Blest, which it held out to its adherents and to its adherents alone. Outsiders were excluded from salvation. Joining it involved long and solemn rites of initiation, culminating in a celebration of "Mysteries," whose secret had to be kept by the communicants under pain of death. Still, something of their nature has leaked out, and it would appear that they centered about some sort of re-enactment of the descent into Hades and the resurrection of Persephone, either by the neophyte himself or in his presence. The impressiveness, the secrecy, the sense of brotherhood and of enjoyment of special privileges, and the assurance of a blessed immortality denied to non-communicants, gave to the Eleusinian Mysteries an immense popularity and prestige throughout the Greek world.

## IV. THE ORPHIC MYSTERIES

**Their Origin.** This cult, however, did not so immediately and profoundly affect philosophical speculation, as did the story of the god Dionysus elaborated in the Orphic Mysteries. Originally a Thracian deity of vegetation, and particularly of the vine and wine, and of the sense of liberation from human bondage and of access to divinity that intoxication bestows, he was worshiped in the beginning by orgiastic rites of frenzied dancing and drunkenness. Probably in the beginning his priest, in whom he was supposed to be incarnate, was sacrificed and eaten by his worshipers, who thus partook of the *mana* or strength of their god. But before the cult entered Greece, the sacrifice of the priest had given way to that of a sacred animal, the wild bull; which now became the vehicle for communicating the divine substance of the god to his devotees.

**Theology and Ritual.** Brought down into Greece from the north, his cult became more civilized, and developed a complicated theology. First begotten by Zeus from a divine mother, Persephone, he was slain in the form of a wild bull by the evil Titans, and was torn to pieces and devoured by them. But his heart was saved. This Zeus ate, and begot him a second time from a human mother, Semele. She, demanding to see her divine lover face to face, was consumed by a thunderbolt. Her unborn child was preserved and placed in the thigh of Zeus from which in the fullness of time it was brought forth and made Lord of the world. The Titans, also, Zeus slew with a thunderbolt, and formed man from their ashes. Hence man is a dual creature, a mixture of the evil substance of the Titans and of the divine substance of the god they had devoured. His soul or mind is a fragment of Dionysus, his body a heritage from the Titans. Salvation consists in freeing the divine within us from the bondage of the body. This can only be accomplished by a long series of reincarnations, at the end of which, if she has sufficiently purified herself, the soul may escape from the wheel of birth and rebirth and be reunited with her divine source.

This purification, however, could only be effected by joining the Orphic cult, assisting at its Mysteries, and following its rule of life. The exact nature of the Mysteries it is difficult to make out, but they seem, like the Eleusinian, to have centered about a dramatic representation of the death of their god and his restoration to life, and to have assigned a great importance to the "omophagia" or partaking of the flesh and blood of the sacred bull. Also, a theoretically ascetic regime

was prescribed, which, however, amounted to little more than abstinence from animal food and the observance of certain technicalities of purification.

**Influence.** The Orphic Mysteries, though never incorporated in the state religion, and always looked at somewhat askance as eccentric and perfervid, enjoyed a great vogue. As we shall presently see, they influenced the Pythagoreans, probably Socrates, Plato, and the later mystical Neo-Platonic and Neo-Pythagorean movements. Also, they contained certain ideas that were given new focus and form by the later mystery religions and Christianity.

#### V. THE MORAL BACKGROUND

**Contrast of Greek with Christian Ethics.** A final point remains—the background of moral tradition and attitude from which Greek ethical speculation emerged. Our modern ethical systems, however independent and strictly scientific they may have wished to be, have developed willy-nilly in the shadow of Christianity, with its spirit of introspection, its preoccupation with the inner life, and its propensity to a dualistic contrast of the spirit with the flesh. We hear a great deal of the will, of conscience, and duty, of sin, the conviction of sin, of this life as merely a preparation for a life to come, and as therefore without final value and justification in itself. Sin is regarded as essentially an alienation of the human will from the divine, and its consequences and punishments in this world are held to be of little importance in comparison with its “spiritual” results.

Moreover, sin has nothing in common with virtue. The motives that provoke it spring from entirely different sources, and move us in diametrically opposed directions. The moral life is a life of conflict between an essentially “higher” and an essentially “lower” nature. For our guidance in this conflict we are bidden not so much to use our reason as to be on the alert for the whispering of some “still small voice” within us whose utterances acquaint us directly with the difference between right and wrong.

**Naturalism of Greek Ethics.** Except in the attenuated form in which it appeared in the Orphic Mysteries, this way of looking at life is absent from early Greek religious and moral meditation. To the Hellenic mind man was primarily a natural fact, allotted, along with all other facts, his specific nature and place in the universe, and enabled by the world-process which had produced him to live happily and completely within the bounds imposed by that place and nature. Super-

natural sanctions and a supernatural destiny were not necessary to right living and well-being. Nor, on the other hand, was there any conflict between an essentially lower and an essentially higher nature to oppose a fundamental obstacle to self-fulfillment and happiness. Man had a single though composite character. Nothing with which nature had endowed him was alien to his best interests or a stumbling block to his perfection. His good lay in as complete and as generous as possible an adjustment of the claims of all his various instincts and desires and interests. All were entitled to contribute their due part to his happiness and to receive their due share in it.

Some conflict, of course, there had to be since the various impulses got in one another's way and could not be all satisfied together. Moreover any one interest might seek more than was its due, or even might efface itself overmuch and not demand enough. But this conflict did not array one set of impulses against another. The same activities figured in both rightdoing and wrongdoing. The difference between virtue and vice was not one of kind but simply of degree and direction. Any activity kept within bounds was good. But the moment it got out of hand and tried to usurp a larger share of the individual life than was befitting it was evil.

**Greek Rationalism.** The adjustment of all these different amounts of activity so as to yield a balanced, harmonious, and happy life, demanded the exercise of intelligence and reason. The moral problem was an intellectual problem—the problem of determining in the first place how much space and scope it was suitable for each interest to have, and then of devising the rules for keeping each within its proper limits. Since man was a social animal, this problem could not be solved apart from social considerations. Individual self-realization must be attained in such a way, and subject to such restrictions, that it harmonized with the general life of the community. The exercise of virtue lay in working out your life within the confines laid upon it by nature and society. The fundamental vice, on the other hand, was “insolence,” which consisted in climbing over the fence and trespassing upon other people's lots.

From this point of view, sin was not primarily an aberration of the will but an error of intellectual judgment. The Greek word for it was drawn from athletics, and meant “to miss the mark.” The sinner was a poor shot when it came to hitting the bull's-eye of a well-balanced and harmonious life. He had a bad eye which failed to distinguish the limitations laid upon him by society and nature. Hence his actions went wild and either overshot or fell short of the mark

of virtuous behavior. Unless his mental eye was corrected by retribution its defective vision would grow on him and become a vicious habit. But once corrected, his vision was as good as ever. No scar or taint remained upon it that could only be removed by divine grace. Sin, then, was to the Greek a functional, not an organic disorder. It could be avoided to a large extent by the use of ordinary intelligence, which was quite sufficient to keep a man reasonably straight. And human society was competent, without divine aid, to effect a cure by punitive and compensatory methods. All in all, we have in this objective and "healthy-minded" moral attitude the ethical partner of the extroverted, outward-looking character of Greek religious experience. Naturally, growing as it does out of a background so different from ours, Greek ethics will impress us in many respects as quite unlike some of our modern systems.

But, after all, we have told only part of the story, though perhaps the larger part. The Orphic Mysteries with their dualism of soul and body, their belief in reincarnation, and their hope of an ultimate escape of the spirit from the bondage, as they considered it, of the flesh, fostered a moral point of view more in line with ours. This point of view is reflected to some extent in Plato's ethics, and plays an important part in the rebellion against the world and the flesh that we find in the later mystical systems. Still, it is under the influence of the tradition of the good life as a harmonious development of all the faculties and exercise of all the functions with which nature has endowed man, that Greek ethics made its great contribution to moral theory.



### *Chapter III*

## THE MILESIAN SCHOOL

### I. BACKGROUND

**Life at Miletus.** At Miletus at the beginning of the sixth century B.C. the native brilliance, broad-mindedness, and insatiable intellectual curiosity of the Ionian Greeks conspired with time and place to produce the first European philosophy. Miletus was long established, large, and powerful. Her great sea-borne trade and her commerce with the Asiatic hinterland had given her the wealth and the resultant leisure which, as Aristotle pointed out, is a prerequisite of philosophy and, we might add, of civilization in general. And it had also made her metropolitan and cosmopolitan, a city of the world, traveled, sophisticated, at ease in the presence of new ideals and ideas. Then, too, the age was one of unrest—political and social, moral, religious, and intellectual. Old orders were being overturned, old traditions challenged. Revolutions were in the air. Kingship and aristocracy were being supplanted, amid much disorder, by cycles of oligarchy, democracy, and tyranny.

Under the protection and patronage of the new despots who were coming to the front the artistic and scientific genius that lay smoldering in the race burst into full flame. Architecture, sculpture, and poetry took on new forms and were put to fresh uses. Alcaeus and Sappho loved and sang at the brilliant court of Lesbos, and Solon and Theognis in their poetry voiced the intellectual skepticism and unrest of the age by attacking the very gods and calling them to account for their misgovernment of the world. In short, man was awakening to new possibilities both in himself and outer nature, and was reaching out to realize them, groping and experimenting, exploiting and reforming, discovering beauty and enlightenment, and creating art and science for their service. Human life had come to one of its sudden flowerings, and had borne once and for all the marvelous fruit of Greek civilization.

Into, or out of, such a city and such times Greek philosophy was born in the last half of the seventh century B.C. in a group of thinkers known as the Milesian School.

## II. GENERAL CHARACTERISTICS OF THE MILESIAN SCHOOL

**Difficulty of Reconstructing the Milesian Teaching.** Reconstruction of the Milesian teaching is difficult. We have only disconnected fragments of their sayings for the most part, and are forced to rely to a great extent upon the reports and criticisms of their systems by later ancient thinkers. These accounts frequently exhibit the tendency of most philosophers to seek and to see prophets and forerunners of their own ideas in the doctrines of their predecessors. Hence they have always to be distilled as clear as possible of the proverbial grain of salt before they can be trusted.

But in trying to organize the original fragments and to strain from later accounts what has been read into the earlier systems, we have also to discount our own prejudices and ways of thinking. To judge correctly the Milesian School we should have to throw ourselves back into their world, to perceive it as they perceived it, and to feel about it as they felt about it. This is almost impossible for us to do. We may indeed note their differences from ourselves, but to note them is not to feel and perceive as the Milesians did.

**Milesian Reliance on the Senses.** We have already indicated their moral and religious background. We have now to add a word about the data at their command, from which their theories had to be inferred. We must remember that they faced the world with a naked and an innocent eye. They perceived only what their unaided senses permitted them to perceive. They lacked entirely those devices for sharpening our powers of perception which have enabled us to see far into space and into past and future time, and more and more deeply into the inner structures and workings of physical and mental events. Hence in their philosophic interpretation of the sum and substance of all things and of the general behavior of the universe they naturally used the stuffs, and the qualities, and the processes with which their physical sense-organs acquainted them. These, moreover, they seem to have accepted quite naïvely at their face value, and probably knew nothing of the more sophisticated and esoteric meanings sometimes read into their stock-in-trade by later commentators. They meant what they said, and what they said expressed the spirit and the knowledge of their own times.

**Basic Problems.** Before taking up the individual thinking of the School, let us review briefly some of its general characteristics. It is all the more interesting to do this, since the Milesians were immediately

confronted by two of the fundamental questions that beset all philosophers, and dealt with them in some ways after a fashion that has never become outmoded.

1. The two basic problems which they recognized and sought to solve were (a) What is the real nature of the universe like? and (b) How is the universe as we perceive it generated by the universe as it actually is? The asking of these questions presupposes a suspicion that the universe is not altogether what it seems to be, and a consequent recognition of a difference and even an opposition between *appearance* and *reality*. But this distinction did not mean to them an opposition of *illusion* or *sense deception* to *fact* and *truth*. The sensible world was to them just as real and truly existent as that of which it was composed. The suspicion that the apparent world deceives us as to its true nature was indeed soon to occur, but it is absent from Milesian thought. Indeed, because of the innocence of their senses the Milesians had to conceive reality in terms of appearance, and the problem of discovering what it was like was the problem of finding some one *perceptible* substance or quality, or mixture of such substances and qualities, to which the sensible world might be reduced 'and from which it could conceivably be derived.

The solution of this problem went hand in hand with finding some observed process of generation in nature in terms of which the production of the rest of the world from the world-principle might be most easily conceived.

2. **Religious Terminology.** It has been pointed out as most interesting and noteworthy that in dealing with these problems the Milesians discarded entirely the current theology and the current theological explanation of the generation of the world.<sup>1</sup> They seem indeed scarcely to have heard of the gods. They almost never mention them, and never introduce them as explanatory principles. They speak, however, frequently of God and the divine, which they identify with the universe as a whole. This was quite in keeping with the tendency that we have already noted of the Greeks to think of the world as animate through and through, but it is an evidence of Greek broadmindedness and example of the absence of "heresy" that the Milesians could so completely ignore the theology of the day in their systems.

From the Milesian, and for that matter from the whole Pre-Socratic use of the terms "God," "divine," "divinity," and the like, we must, however, exclude a large part of the significance they have come to

<sup>1</sup> Cf. Heinrich Gomperz, *Problems and Methods of Early Greek Science*, to which I am much indebted for my discussion of the Milesians.

have for us. We have become so accustomed to a personal God, that for us their first association is that of a personal being. It is highly improbable that they had any such association for the Pre-Socratics. Personality, as we have already seen, does not appear to have had any very great interest for the early Greeks. Certainly it was not a philosophic concept, and presented no philosophic problem. The "divinity" of the universe, like that of the gods, lay rather for the Milesians and other Pre-Socratics, in its exemption from human limitations—in its immortality, its agelessness, its fullness and ease of life, and in its possession and exercise of power. These were awesome and majestic things to be revered and worshiped wherever they were made manifest. Whatever exhibited them was divine.

3. **The Soul.** We must make similar reservations with regard to the Milesian use of the word "soul." Here again we have a term whose first connotation for us is that of a self-conscious, personal entity that perceives and feels and thinks and possesses moral character. The Milesians, however, seem to have used the word much as Homer did. It meant to them little more than the *animate* character of a thing. Anything that *lived* had a *soul*, but not necessarily a mind or a personality. This principle of animation was *deathless* and survived the extinction of the individual thing to which it had given life, but its survival did not involve what we today call personal immortality.

4. **Use of Analogies.** In their solutions of the problems we have just mentioned, the Milesians resorted to analogies drawn from experience. In so doing they were merely setting the pace for subsequent philosophy. Almost all systems have an analogy at their core. We say that the universe behaves as if it were a machine, or an organism, or a work of art. Modern idealism, indeed, has added the analogy of a personal career and tells us that the universe behaves as if it were a cosmic individual living out his life and fulfilling his possibilities. And the Greeks humanized the organic analogy—by thinking of the universe as a political organization modeled after their city states.

All these analogies—except of course that of a personal career—were used by the Milesians. But whereas we commonly use one and the same analogy and seek to reduce everything in the universe to terms of it, the Milesians used a number of analogies in dealing with different groups of phenomena, and did so frequently, as we shall see, in an inconsistent manner and with confusing results. For example, the organic, political and "plan" analogies were employed in interpreting the general structure and operations of the universe, but when it came to particular processes and phenomena the mechanical

analogy was applied and the cause of the occurrence was sought simply in antecedent natural events.

**"Acts of God" Explained Mechanically.** This curiously enough was the case where we should least expect it to be so, as in the explanation of portentous, unusual and catastrophic phenomena. We still traditionally call such events "acts of God," and many people still believe that they are the results of divine intervention—just as the Greeks were wont to attribute them directly to the thunderbolt of Zeus, the trident of Poseidon, the forge of Hephaestus, or the loosing of the captive winds of Aeolus. Here, then, we might expect to find the Milesians appealing at least to the quasi-moral and social considerations of balance and harmony and justice by which the world as a whole was supposed to be steered and by which its basic processes, like the movements of the heavenly bodies and the alternation of generation and decay, were supposed to be directed. But although the universe in general may behave as it does because such behavior is meet, right, fitting and logical, we hear next to nothing of propriety, moral, legal or logical, as a reason for the occurrence of extraordinary phenomena. Earthquakes, tempests, eclipses, and other extraordinary events, like the usual ones, are regarded as caused mechanically by prior natural phenomena.

5. Generalizations founded upon this mechanical linkage and sequence of particular events, became incipient *laws of nature*, as distinguished from *philosophical hypotheses*. And these were inferred from a wide range of data, which later were divided up among the various sciences. To put it in modern terms, the Milesians were greatly interested not only in philosophy, but in geometry, astronomy, meteorology, physics, biology and psychology, and in problems we now regard as belonging to the theory of knowledge. Many of their theories in these fields we should now regard as crude and wild, but some of them are prophetic of later scientific developments.

6. Mechanical analogies were also used, not only by the Milesians but by the Pre-Socratic philosophers generally, to show how the universe was built up out of its constituent principle or principles. Two analogies in particular were employed, (a) that of the condensation and rarefaction of a definite substance, and (b) that of a turgid and nondescript mixture separating itself into distinct elements and qualities frequently conceived as emerging in pairs of opposites. The analogy of rarefaction and condensation was prophetic. It contained the seed of the theory that all qualitative variety can be expressed in terms of purely quantitative difference, and that all change can be

expressed in terms of movement in space—a theory that in the next century came to full flower in the teaching of Leucippus and Democritus and has since borne continual fruit as a basic concept of modern science.

7. **Hylozoism.** By Aristotle the Milesians, and for that matter the other Pre-Socratics as well, were called *physicists* and *physiologists*, not however in the specialized, modern sense of the words, but because of their preoccupation with the *physis* or nature and source of things in general. They are nowadays also called *hylozoists*, because of their view that the universe was as essentially animate as it was material. The term is derived from the Greek word for stuff (*hylé*) and life (*zōé*) and was apparently coined by the British philosopher Cudworth in the seventeenth century to describe early Greek philosophy. It is still used of theories that regard the physical universe as animate and organic.

8. **Milesian Philosophy Motivated by General Curiosity.** We today, reflecting upon the Milesians and, for that matter, the other Pre-Socratics in the light of our earlier discussion of the motivations of philosophy, can safely say, I think, that they were actuated by a general, disinterested curiosity regarding the nature of the universe rather than by any special moral interest in showing it to be congenial with and congealed about prior human preferences as to its make-up. Their primary interest was, as Aristotle said, in *physis*—in the sum and substance and general lay-out and behavior-pattern of all things—of which man was but one. They were not anthropocentric; nor were they anthropomorphic except perhaps in their extension of the social analogy of propriety and equity to the behavior of the universe. But this cosmic “justice” that held all things within their proper bounds and would redress any wrong done it by any overstepping of these bounds on the part of anything, was as dehumanized as human justice is, or tries to be, impersonal in its dealings with human individuals. Furthermore, as we have already noted, and shall soon have occasion to observe in detail, the Pre-Socratics either simply ignore or actively criticize personal gods created in man’s image and apply the term “divine” without personal connotation; to the stuff of which all things equally are made and to a world-structure that has no particular apex.

### III. THALES

Thales was the founder of the Milesian School and the father of Western philosophy. Born at Miletus in the last half of the seventh

successful businessman who is said to have established a monopoly in olive oil, and a mathematician and astronomer of note in his day—as well as the first European philosopher. Indeed his attainments won him a place among the famed Seven Sages of Greece.

**The World-Stuff is Water.** Our knowledge of his philosophic and scientific speculations is scanty. We have no direct quotations from him, and do not even know whether he ever wrote down his opinions. Aristotle, however, reports that Thales believed *water* to be the stuff of which all things are made, that he taught that the earth floats on water, and that he said that all things are full of gods, and that the power of the lodestone to move iron shows that it must have a soul—or in other words that it is a living thing.

How he came to the conclusion that *water*, rather than some other substance, is the world-stuff we do not know. Neither do we know how he conceived the derivation of other substances and things from *water*, although the analogy of rarefaction and condensation might well have suggested itself to him. Water could be seen apparently transforming itself into vapor, and even, in the phenomenon of “the sun drawing water,” into fire. Then, too, the process of evaporation was reversed in falling rain, and fire and air might seem to be returning to water. Again, it froze solid before one’s eyes, and it was thought to turn to earth in the silt it deposited at the mouth of the Nile and of other rivers. So, too, people believed that the springs that bubbled up and the mists that rose from the ground were earth becoming water again. The existence of water beneath the earth, as evidenced by springs, might also have suggested the opinion that the earth floats on water. Then, too, there were theological creation-stories that the ocean was the source from which the world arose. Water, moreover, was the giver of life to all animate things. Animals and vegetables alike depended on it. The seed of all animals was wet.

But these are only conjectures of later commentators.

**The World-Stuff Divine.** The remarks that all things are full of gods, and that magnetism is evidence of life in the objects that possess it are probably no more than expressions of Thales’ “hylozoism.” It goes without saying that for him, as for the whole Milesian School, the world-stuff, whatever it was, was as profoundly moving, changing, living, and perhaps thinking, as it was material and tangible. Later philosophers, to be sure, tried to read into Thales a belief in a world-soul, or even in a divine mind—but this attempt throws light upon their opinions rather than upon his.

**Scientific Achievements.** Thales is credited with having introduced geometry from Egypt, speculated about the causes of the seasonal rise and fall of the Nile, and predicted an eclipse of the sun that according to the calculation of modern astronomers took place in May, 585 B.C. He is also said to have been an inventor and engineer and a city-planner to have applied the geometry he learned in Egypt or elsewhere to the measurement of the height of buildings and the calculation of the distances of ships at sea, and to have taught sailors how to navigate by observations of the constellation of the Big Bear. The eclipse he may very well have predicted, for the Babylonians had already noted the intervals separating eclipses both of the sun and the moon, and were therefore able to predict roughly the times at which they were likely to occur, though not their path. Very likely, then, he knew that an eclipse was due, and was lucky in that it was actually visible in Miletus.

#### IV. ANAXIMANDER

**The World-Stuff Is an Indefinite Something.** Of the teaching of Thales' pupil, Anaximander, who flourished in Miletus about 546 B.C. we have more information. The world-stuff he described as an Indefinite Something, from which pairs of opposites like hot and cold, wet and dry, were continually being separated out, and into which they were continually relapsing. Just how Anaximander conceived this world-stuff we do not know. But since those of his successors who used his analogy of separation to describe the generation of the universe from it, regarded it as a confused mixture of elements and qualities, it is not unlikely that he thought of the Indefinite Something, not as homogeneous, but as a heterogeneous mass.

This mass he apparently conceived as infinite in space and time, as full of gods, whom he may have identified with the stars, and as perhaps encompassing a plurality of co-existent worlds coming into and passing out of being. He appears, in that case, to have broken away from the popular notion of the heavens as an enclosing vault within which the whole universe was compressed, and to have envisaged in his way our modern view of a space indefinitely sprinkled with galaxies which in their turn are filled with suns and solar systems, of which ours is one.

**Plurality of Worlds.** This doctrine of a plurality of worlds coming into and passing out of being throughout all space is, if it can be attributed to Anaximander, evidence of a daring and adventurous imagination. Though the solar system remained geocentric, it and with



it the earth were detached from a central position in the universe and became incidental to a grander cosmology. All this is largely conjecture, and in any case Anaximander's interest was mainly in the geocentric world in which we live. The theory, however, proved to be but a flash in the pan. It was, to be sure, revived by Leucippus and Democritus. But the earth was made again the center of the whole universe, and the heavens were contracted once more to an enclosing vault, by Plato and Aristotle, whose opinions were followed by the Scholastics, and prevailed till the new astronomy of the Renaissance recaptured Anaximander's vision of an infinite space in which a plurality of systems was dispersed.

The process of separation from and relapse into the Indefinite Something, although described after the mechanical analogy, is also explained in terms of social and ethical propriety and fitness. The separated opposites conflict with and reciprocally destroy one another eventually "as is ordained; for they give satisfaction and reparation to one another for their injustice according to the ordering of time."<sup>2</sup> There has been conjecture as to whether Anaximander meant this to be taken literally, and as to what he meant by it if he did. But at least he seems to have felt that any cessation of the alternation of opposites and final victory of one over the other would have disturbed a certain fitness and fair apportionment of things and upset the balance of the world-process, which ordains for each member of the pair its turn at existing.

✓ **Cosmology.** Anaximander gives us quite a detailed account of how a world is formed within the Indefinite Something. In the beginning "something capable of begetting hot and cold was separated off," and began to revolve, like an eddy or vortex. The flaming heat swirled around and enclosed the cold and moist, which became differentiated into earth, water, and air, and formed a cylinder in which the one was superimposed upon the other. The earth itself is shaped like a drum and is suspended in the Indefinite at the center of the vortex and was probably conceived as sharing in its rotation.

**Astronomy.** The air, expanding under the influence of the surrounding fire, disrupts it and breaks it into revolving wheels. These wheels of flame, however, are obscured by the air which envelops them, except for "breathing-places—certain pipe-like passages at which the heavenly bodies show themselves. That is why, when the breathing holes are stopped, eclipses take place. And the moon appears now to

<sup>2</sup> Trans. Burnet, *Early Greek Philosophy*, 3rd ed., p. 52, from which almost all the translations of the fragments of the Pre-Socratics are taken.

wax and now to wane, because of the stopping and opening of these passages. . . . The sun is the highest of all, and lowest are the wheels of the stars." These "hoop-like compressions of air, full of fire, breathing out flames at a certain point through orifices"<sup>3</sup> revolve about the earth in such wise that these orifices are carried beneath it—hence the rising and the setting of the sun and moon, the planets and the constellations of the stars. Thunder and lightning also are due to the violent and sudden rending of the envelope of air and the flaming out through the rents of the enclosed flame.

Anaximander also speculated about the comparative sizes of the solar and lunar wheels with respect to the size of the earth. His views were somewhat numerological in character, and were probably influenced by the view that some numbers—especially the multiples of three—were sacred.

**Biology.** On our earth, we are told, "Living creatures arose from the moist element, as it was evaporated by the sun." They were "enclosed in prickly bark. As they advanced in age they came out upon the drier part. When the bark broke off they survived for a short time."

As for man, he "was like another animal, namely a fish in the beginning. . . . He was born from animals of another species. The reason for this is that while other animals quickly find food for themselves, man alone requires a lengthy period of suckling. Hence, had he been originally as he is now, he would never have survived." More specifically, "at first human beings arose in the inside of fishes, and after having been reared like sharks" (whose gestation somewhat resembles that of mammals) "and become capable of protecting themselves, they were finally cast ashore and took to land."<sup>4</sup>

#### V. ANAXIMENES

**The World-Stuff Is Vapor or Air.** Anaximander's successor, Anaximenes, who taught at Miletus during the last half of the sixth century B.C., reverted towards the teaching of Thales, in that he chose a particular and homogeneous element for his world-stuff. This element is *Breath*, a concept which includes both air and vapor. "From it, he said, the things that are, and have been, and shall be, the gods and things divine took their rise, while other things come from its offspring."<sup>5</sup> *Air-vapor*, like water, could be observed, it might seem, assuming liquid and then solid form, and according to the teaching

<sup>3</sup> Trans. Burnet, *op. cit.*, pp. 66-67.

<sup>5</sup> Trans. Burnet, p. 73.

<sup>4</sup> Trans. Burnet, pp. 70-71.

of Anaximander was half-way between the dry and the hot on the one hand and the moist and the cold on the other. Moreover, all animate things were dependent on it for life, and Anaximenes extended this dependence to the whole universe. "First . . . as our soul, being air, holds us together, so do breath and air encompass the whole world."<sup>6</sup> Air, then, was a suitable candidate for the world-principle.

**Cosmology.** The "offspring" of the divine Air, which in their turn produce the rest of the universe, are generated by condensation and rarefaction—a view that, as we have already pointed out, may have been held also by Thales, and that was prophetic of modern scientific theory. When Air "is dilated so as to become rarefied, it becomes fire; while winds on the other hand are condensed Air, Cloud is formed from Air by felting [an analogy drawn from making wool into cloth], and this still further condensed becomes water. Water condensed still more turns to earth, and when condensed as much as it can be, to stones."<sup>7</sup>

Our world is produced as follows. "As air was felted, the earth first came into being. It is very broad and is accordingly supported by the air . . . and is shaped like a table. . . . The heavenly bodies were produced from the earth by the moisture rising from it. When this is rarefied fire comes into being, and the stars are composed of the fire thus raised aloft" and are broad, fiery leaves, as it were. There are also bodies of earthy substance in the region of the stars, revolving along with them. "However, the heavenly bodies do not move under the earth," as Anaximander had maintained, "but round it, as a cap turns round our head. The sun is hidden from sight, not because it goes under the earth, but because it is concealed by the higher parts of the earth, and because its distance from us becomes greater."

Lightning, hail, snow, the rainbow and earthquakes were also treated by Anaximenes. Lightning is due to sudden rarefactions of Air. "Hail is produced when water freezes in falling, snow when there is some air imprisoned in the water. The rainbow is produced when the beams of the sun fall on thick, condensed Air (Vapor). . . . The cause of earthquakes was the dryness and moisture of the earth, occasioned by droughts and heavy rains respectively."<sup>8</sup> It is interesting to note that Anaximenes could ignore with impunity the theological teaching of his day that the thunderbolt is cast by the hand of Zeus, that the rainbow (Iris) is a goddess, and that earthquakes are expressions of the divine wrath of Poseidon.

<sup>6</sup> Trans. Burnet, p. 73.

<sup>8</sup> Trans. Burnet, *op. cit.*, p. 76.

<sup>7</sup> Trans. Burnet, *op. cit.*, p. 76.

**Prestige of His Teaching.** It is a pity that we have not more knowledge of Anaximenes. His teaching seems tame and provincial in comparison with the bold and truly cosmic flight of Anaximander's imagination, which broke through the "flaming ramparts" of our world into illimitable space, and peopled it with systems like our own. Yet he enjoyed far greater prestige with the philosophers of antiquity, and exerted far more influence.

His doctrine had, to be sure, two advantages over that of Anaximander. His reversion to a simple, homogeneous, determinate world-principle was more in line with the tendency of the human mind to seek a single explanation of the multiplicity of the universe, than was Anaximander's doctrine of an indeterminate and somewhat cloudy world-stuff. And his analogy of condensation and rarefaction showed how one simple and homogeneous substance might conceivably give rise to a plurality and variety of other substances, and was generally a clearer and neater way of deriving the universe from the world-principle than the analogy of a "separating out" of a medley of constituents that lay fused and confused within it. However that may be, Anaximenes' system was regarded as the "last word," figuratively as well as literally, of the Milesian School, and it is he who was invoked as the great exponent of the early Ionian philosophy.

## VI. XENOPHANES

**Life and Character.** In 494 B.C. Miletus was conquered by the Persians. Anaximenes was probably dead by this time. At any rate, we hear no more of a Milesian School. Ionia, however, had still two more thinkers to contribute to the history of philosophy, Xenophanes and Heraclitus. As Xenophanes is said to have been a pupil of Anaximander, and shows signs of having been influenced by him, as well as by the general outlook of the School, we may well deal with him at this point.

He was born at Colophon near Ephesus, probably about the middle of the sixth century B.C., but spent much of his life in Sicily. He lived, it is said, to be ninety-two years old. At that time there was considerable reaction against the over-civilization and luxury of the age, as well as a religious revival, and Xenophanes is best understood in the light of these movements. He was essentially a reformer, and we find him inveighing against all sorts of things—against the cult of the athletic hero and of brawn instead of brains, against over-dressing

and over-perfuming, and getting drunk at dinner parties, and indulging in empty conversation. Besides being a reformer he was a poet, and vented his criticisms in the form of satirical elegies in which it is sometimes difficult to distinguish satire and poetic license from plain statement.

**Attack on Orthodox Theology.** The revived interest in religion, however, did not bring Xenophanes into the orthodox fold or the mystery cults. On the contrary, it inspired a thorough and unsparing assault on contemporary theology, upon which his fame is chiefly based.

"Homer and Hesiod," he tells us, "have ascribed to the gods all things that are a shame and a disgrace among mortals, stealings, and adulteries, and deceivings of one another. . . .

"But mortals deem that the gods are begotten as they are, and have clothes like theirs, and voice and form.

"Yes, and if oxen or lions had hands and could paint with their hands, and produce works of art as men do, horses would paint the forms of the gods like horses, and oxen like oxen, and make their bodies in the image of their several kinds.

"The Ethiopians make their gods black and snub-nosed; the Thracians say theirs have blue eyes and red hair. . . .

"There never was, nor will be a man who has certain knowledge about the gods and about all the things I speak of. But all may have their fancy.

"Let these be taken as fancies something like the truth."

There is "one god, the greatest among gods and men, neither in form like unto mortals nor in thought.

"He sees all over, thinks all over, and hears all over.

"But without toil he swayeth all things by the thought of his mind.

"And he abideth ever in the self-same place, moving not at all; nor doth it befit him to go about now hither now thither."<sup>9</sup>

This attack on the current theology based upon Homer and Hesiod, which was later to be repeated by Plato, and the substitute for it proposed by Xenophanes, suggest to us, with our religious background, an abandonment of polytheism for monotheism. It certainly discarded polytheism, but if taken, as it probably should be, in connection with the philosophy of Xenophanes' times rather than with the thought of our own, it is at least doubtful whether it indicates a belief in monotheism, as we understand the word. It looks more like a restate-

<sup>9</sup> Burnet, *op. cit.*, pp. 119-121.

ment in more detailed terms and theological phraseology of the "hylozoism" of the Milesian School. The "one god" was, many scholars think, identified with the universe, and the seeing, thinking, and hearing all over, and "the swaying of all things by the thought of his mind" were very likely little more than a re-affirmation of the active, living character of the Milesian world-stuff, and of the organic and social analogies which the earlier philosophers had invoked in describing the behavior of the *physis*, or nature, of all things.

· **Cosmology.** We have also some reputed speculations of Xenophanes regarding the nature of the world-stuff and the generation of the universe. "All things come from earth and in earth all things end . . . all things are earth and water that come into being and grow . . . for we are all born of earth and water." Earth is "being gradually dissolved by the moisture." Marine life arose when all things were mud, as is attested by the imprints of seaweed and fishes found in rock. "All human beings are destroyed when the earth has been carried down into the sea and turned to mud. This change takes place for all the worlds."

As for our earth, its limit "above is seen at our feet in contact with the air; below it reaches down without a limit." The air extends infinitely upward, and the surface of the earth stretches horizontally to infinity. The heavenly bodies are ignited clouds, which move in a straight line to infinity above the terrestrial plain. Hence it would appear that the heavenly bodies of one day are not those of the preceding, but are a completely new solar and sidereal outfit. So far as the usefulness of the heavenly bodies is concerned, the sun may help generate and sustain life, but the moon doesn't do a thing and is quite superfluous.

This account is obviously somewhat influenced by the speculations of Anaximander. But it seems so naïve and inconsistent in various points that it has been suggested<sup>10</sup> that it is meant more as satire than as a serious theory. In any case, it plays ducks and drakes with Greek theology, stripping, it might seem, with malice aforethought, heaven and earth and ocean and all the heavenly bodies of their divinity, and substituting natural for supernatural entities and operations. In other words, it may be a "scientific" reinforcement of Xenophanes' attack upon orthodox religion, and perhaps an extension of his "Let these be taken as fancies something like the truth" to philosophical as well as theological systems.

<sup>10</sup> Cf. Burnet, *op. cit.*, pp. 120 ff.

Xenophanes appears also to take a little fling at the doctrine of re-incarnation taught by the Orphics and by Pythagoras. "Once they say that he [Pythagoras] was passing by when a dog was being beaten, and spoke this word, 'Stop! don't beat it! For it is the soul of a friend that I recognized when I heard its voice.'"<sup>11</sup>

<sup>11</sup> Burnet, *op. cit.*, p. 118.

## *Chapter IV*

# PYTHAGORAS AND THE PYTHAGOREANS

### I. THE PYTHAGOREAN BROTHERHOOD

**Life of Pythagoras.** We turn now to an interesting movement in Greek philosophy which contributed greatly to its future course. The founder of this movement, Pythagoras, was a man to whom many legends attributed semi-divine powers and supernatural adventures. Born at Samos, and possibly at one time a pupil of Anaximander, he emigrated to Croton in southern Italy, somewhere about 530 B.C., and there founded a brotherhood whose rule, taboos, and religious beliefs appear to have been influenced by the Orphic Mysteries. The Order grew rapidly and exercised considerable moral and political influence wherever it established its lodges. In the struggle then in progress between aristocracy and the democratic movement, the Pythagoreans allied themselves with the aristocratic party. Hence, when the aristocratic governments of the south Italian cities were overthrown in the middle of the fifth century B.C., the Pythagoreans shared their fate. Many of the order were killed and many had to flee for their lives, some of them to Greece. Others, however, managed to stick it out in Italy, particularly at Rhegion (Reggio) on the Straits of Messina. Later, under the threat of the growing power of Syracuse, they, too, found it advisable to emigrate. Tarentum, however, which successfully defied Syracuse, remained a Pythagorean center of some importance. There the liberal tyrant of Tarentum, Archytas, who was a friend of Plato's, belonged to the Order.

**Religious Teachings.** On the religious side Pythagoras and the early Pythagoreans emphasized the doctrine of reincarnation, and practiced a rule of life calculated in their opinion to purify the soul. But just how they conceived the soul and reincarnation is obscure. There is some ground for supposing that they followed the Orphic belief in a wheel of birth and rebirth from which the soul, after sufficient purification, for the most part ritual in character, might hope eventually to escape to reunion with the divine. But there is also reason for



holding that they regarded reincarnation as simply an automatic recurrence, every so often, of the same old person, repeating in every detail the same old life, and so on *ad infinitum*. In any case Pythagoreanism disregarded entirely the elaborate theology built up about the person of Dionysus, and, for that matter, considered Apollo as its patron god.

**Scientific Attainments.** The members of the Order were also scientists of no mean rank, especially in the fields of mathematics, music, astronomy and medicine. To them we owe, for example, the formulation of the so-called "Pythagorean" proposition in geometry. Also, they had made important observations on the arithmetical proportions that govern musical harmony. Their belief that the movements of the heavenly bodies produce concordant notes was later expressed in English in our well-known phrase "the music of the spheres." To them we owe also the first intimation that the earth is not the center of the solar system.

## II. THE NUMBER THEORY

**Dualism of Limit and the Unlimited.** In his philosophical speculations Pythagoras is apparently influenced by Anaximander and Anaximenes. At any rate, he considers that the universe is ultimately divisible into two opposed principles, one of which he describes as Unlimited Breath. The other principle is Limit. It is with the nature and operations of Limit that the famous Pythagorean teaching that all things are Numbers is concerned.

This teaching is an extension of Pythagoras' interest in mathematics, and is perhaps also bound up with a "numerological" belief in the sacredness and magical efficacy of certain numbers. In considering the mathematics of the day, we must remember that the Greeks lacked the symbol *o*, as well as the arithmetical notation that enables us to perform on paper the operations of addition, subtraction, multiplication, and division. They commonly used the letters of the alphabet, as did the Romans, to symbolize numerical quantities, which did not lend themselves to arithmetical manipulation by such means. At the same time, being ten-fingered, they naturally reckoned in groups of tens. And it appears that already in Pythagoras' time mathematicians were looking for better and more maneuverable symbols than those provided by letters.

**Greek System of Notation Geometrical not Arithmetical.** These they found by an adaptation of geometry, in which arrangements of dots, or of the letter *alpha*, were used. Pythagoras' fame is said to

rest on his new arrangement of these dots in the form of a triangle tapering from a base of *four*, through *three* and *two* to *one*, to represent the *dekad* or number *ten*. This was called the *tetraktys*, or aggregate of four, expressing the fact that  $1 + 2 + 3 + 4 = 10$ . The sum of  $1 + 2 + 3 + 4 + 5$  and so on *ad infinitum* could also be expressed by similar triangles, formed by a similar tapering down, one less dot to each line, from a base containing a number of dots equal to the last number of the series. Such sums of series of integers were therefore known as triangular numbers. So, too, the sums of series of odd numbers, of any length, e.g.,  $1 + 3 + 5 = 9$ ;  $1 + 3 + 5 + 7 = 16$  can be expressed in squares of three rows of three, or in four rows of four, and so on indefinitely. These are called square numbers. And, stop the series of even numbers where you will, its sum can always be arranged in an oblong in which the number of dotted lines is one less than the number of dots in the line. For example,

$$2 + 4 + 6 = 12 = 3 \text{ rows of } 4 \text{ dots}$$

$$2 + 4 + 6, \text{ etc.} + 28 = 210 = 14 \text{ rows of } 15 \text{ dots}$$

$$2 + 4 + 6, \text{ etc.} + 46 = 552 = 23 \text{ rows of } 24 \text{ dots}$$

Hence such series were known as oblong numbers.

**Points, Lines, Planes and Solids.** Again, the minimum requirement for outlining or, we might say, composing, a line, a plane, and a solid was respectively two, three, and four dots or points. That is, the line is made of two units or the number 2, the plane, of three units or the number 3, the solid, of four units or the number 4. With the introduction of solids into the scheme, the way was open for pyramidal and cubic arrangements of dots, but although later Pythagoreans entered this field, we do not know whether Pythagoras himself pushed his study of sums of number series into the third dimension. Finally Pythagoras' interest in music probably led him to the discovery of the octave and the proportions of harmonic intervals—a discovery that might suggest that sounds, or at least musical notes, were made by, and of, numbers.

**All Things Are Numbers.** However this may be, the Pythagoreans concluded that things are really Numbers. How far and into what detail they carried this doctrine we do not know—but some of them certainly pushed it apparently at an early date to the somewhat fantastic extent of reducing not only objects, but moral qualities, and political and social institutions to Numbers. Thus justice is a square number, perhaps because it involves harming him who has harmed,

or taking the doer and the "done by" twice over, and 5, which is the union of the first even with the first odd combination of units, is the nature of marriage.

### III. THE GENERATION OF THE UNIVERSE

**Cosmology.** In the beginning, the unit-dot-point, or number one, was formed in the Unlimited. Then, if we may trust Aristotle's account of the Pythagoreans, "the nearest part of the unlimited began to be constrained and limited by the limit,"<sup>1</sup> and to separate and distinguish units from one another, "as if it were like what separates and distinguishes the terms of a series."<sup>2</sup> Thus Numbers came into existence. Given the geometrical nature of their arithmetical thinking, the Pythagoreans may have envisaged the initial situation as emptiness dotted at intervals with points. Furthermore, in view of their interest in astronomy, their known assimilation of the opposites, light and darkness, to Limit and the Unlimited, and their possible actual identification of the Unlimited with darkness and the Limited with Fire, they may have imagined the first state of the universe as a limitless black void of mist or breath teeming with star-like points of light. Groups of different quantities and different arrangements of these points might constitute the Numbers that defined and distinguished the basic elements and different classes of things. Indeed, we are told by Aristotle that one Pythagorean went so far as to decide "what was the number of what (e.g., of man or of horse), viz., by imitating the figures of living things with pebbles, as some people bring numbers into the forms of triangle and square."<sup>3</sup>

**Pairs of Opposites.** In any case, the opposition of Limit to the Unlimited was reflected in an opposition of light to darkness, and in eight other pairs of contrasts, odd and even, one and many, right and left, male and female, resting and moving, straight and curved, good and bad, square and oblong. And there was a tendency to extend such pairs to other contrarities. Furthermore, the members of these pairs were set over against each other as the better to the worse. Limit, light, odd, male, etc., are *right*. The Unlimited, darkness, even, female, etc., are *wrong*. Or at any rate the one set is superior, the other inferior. We must remember that the unlimited suggested to the Greek mind not perfection, as it does to us, but obscurity and haziness;

<sup>1</sup> *Metaphysics*, XIV, 3, 1091<sup>a</sup>13 ff. (Trans. Ross).

<sup>2</sup> *Physics*, IV, 6, 213<sup>b</sup>22 ff.

<sup>3</sup> Aristotle, *Metaphysics*, XIV, 5, 1092<sup>b</sup>10 ff.

whereas limit suggested clearness and intelligibility. Limit might seem, then, the source of the "virtues" of the universe, the Unlimited the source of its "vices." Religiously, too, the Pythagoreans were disposed, as we have seen, to dualism.

#### IV. ASTRONOMY, PHYSICS, ETC.

Proceeding now to the further stages of the formation of the universe, we find Pythagoras possibly adopting Anaximander's new theory of the nature of the heavenly bodies, though this is uncertain. He seems, however, to have rejected the vortex theory. The earth he probably regarded not as flat but as spherical, and placed it at the center of the universe with the sun. The moon, the known planets, and a heaven of fixed stars revolved about it. At an early date, too, the Pythagoreans had noted that, whereas the whole heaven seemed to revolve daily about the earth from east to west, the sun, moon and planets had also a reverse, slower, varying and wobbling movement from west to east, and exhibited other departures from uniform circular motion—to explain which they may have evolved some sort of theory of component motions.

The doctrine that the movements of the heavenly bodies gave off sounds at harmonic intervals from one another, may go back to Pythagoras himself. Later it was considerably elaborated.

Sooner or later, too, the Pythagoreans are said to have displaced the earth from its central position and to have made it revolve, along with the other heavenly bodies, about a "central-fire," whose light is reflected by them. And the idea that the earth also rotates on its own axis has been attributed to them. In any case, ideas appear to have been afloat that eventually made port in the heliocentric system of the astronomer Aristarchus. Also, the existence of a new planet, the *antichthon* or "counter-earth" was assumed to explain eclipses, which Anaximenes also had explained by the intervention of dark planets. We do not see either the "counter-earth" or the "central-fire" because our part of the earth is turned away from it. The introduction of the *antichthon* raised the number of bodies, including the heaven of fixed stars, revolving about the central fire to ten, the sacred *tetraktys*; and Aristotle adduced this fact as a reason for the assumption of the new planet. That he meant this to be taken seriously has been questioned.

It is possible, also, that Pythagoras accepted Anaximander's view of a plurality of worlds. At any rate, an early Pythagorean is said to have held that there were a hundred and eighty-three worlds disposed in the

form of a triangle, which is, we may recollect, the geometrical form of the *tetraktys*.

**Development of Pythagoreanism.** As time went on and the Pythagoreans had to deal with new mathematical discoveries and philosophic speculations, the number-theory was developed to meet the situation. Specific geometrical arrangements, for example, were assigned to the four elements. Fire was perhaps regarded by them, as it was by Plato, as a composition of pyramidal particles, earth possibly as composed of cubes, water of icosahedrons, and air of octahedrons—while the dodecahedrons formed the frame for the enclosing sphere of the heavens.

Another later development was the theory that the soul is an attunement of the elements and pairs of opposites present in the body. This view is destructive of the earlier doctrine of the immortality and reincarnation of souls. Whether and how the two teachings were held together we do not know. It may be also that the attunement was conceived musically as constructed according to the intervals of the fourth, the fifth, and the octave—a conjecture that would support the attribution of Plato's doctrine of the tripartite soul, to which we shall presently come, to the Pythagoreans.

## V. FINAL CONSIDERATIONS

It should be pointed out that the reconstruction of the Pythagorean philosophy is attended with very great difficulties and has given rise to much controversy. We have no original fragments. It is hard to say what is early doctrine and what is later elaboration. It is also hard to determine what has been misunderstood by later commentators, and what they have read into or added to the teaching because of their own bias, or to suit their own purposes. These points are in dispute among modern scholars. Hence the above account should be read, as it has been written, with considerable suspicion as to its accuracy.

**Contributions to Philosophy.** However, we may note in the Pythagorean system several pretty well-established points of importance to the history of philosophy. The parts played by Limit and the Unlimited influenced Plato, and contributed to the eventual distinction between Form and Matter stressed by both the Platonic and the Aristotelian systems. Again, not only did the theory that things are really Numbers greatly affect Plato, but it also hit in its way upon a cardinal point of modern science. We, too, do not think we have

grasped the essence of a thing till we can express its nature by a mathematical formula. In chemistry, for instance, substances are defined and distinguished by the numbers that indicate the arithmetical proportions borne by their constituent elements to one another. And the so-called models constructed by physics to illustrate the nature of the actual world or of possible universes, boil down, when their pictorial content has been precipitated from them, to strings of equations.

## Chapter V

# HERACLITUS

### I. GENERAL CONSIDERATIONS

**The Problem of Change.** By the beginning of the fifth century B.C. philosophy had acquired more sophistication. Apparently it had become acquainted with certain problems and difficulties which were inherent in the earlier systems, but which the Milesians seem not to have realized. Foremost among these problems was that of the nature and possibility of *change*. To the Milesians it seems not to have occurred that there were any difficulties in the idea of the transformation of a single homogeneous world-stuff or of distinct, homogeneous opposites into a world of heterogeneous, changing, shifting phenomena. But sooner or later the question was bound to arise whether any such transformation was really conceivable. How could Water, or an Indeterminate Something, or Vapor be *really* changed into a lot of things they apparently were not? And how could they remain *really* the same in spite of, and throughout, all their transformations? How could Water *become* a flower, and yet remain Water? How could the Indefinite Something *become* a pair of definite opposites quite different from it and from each other, and how could they become a world of particular things different from themselves? Furthermore, how could a flower really *become* a fruit, if both flower and fruit were really made of Water or Air? For the apparent transformation of one into the other would be really a transformation of Water into Water, or Vapor into Vapor—which was equivalent to no transformation at all. Was it, then, thinkable that opposites and differences should be really identical? Was it conceivable that one thing should turn into another?

At any rate both Heraclitus and the Eleatics were agitated by such questions, and in attempting to answer them were led to very different philosophical conclusions.

## II. HERACLITUS' LIFE

**Sense of Superiority.** Heraclitus comes on the scene just a hundred years after Thales. Born at Ephesus, he was in his prime about 500 B.C., and lived to see the repulse of the Persians by the Greeks at Marathon in 490, and again at Salamis in 480. He belonged to the aristocratic party and despised the common herd. His fellow Ephesians he told in so many words to go hang themselves, for having cast out one of their best citizens, saying, "We will have none that is best among us; if there be any such, let him be so elsewhere and among others."<sup>1</sup> He also had little use for Homer and Hesiod, and still less for the Orphic Mysteries, which he denounced as mad and unholy. He condemned the worship of images and ridiculed the rites of atonement for blood-guilt. He was contemptuous, too, of the philosophy of his day, and spoke disparagingly of both Pythagoras and Xenophanes, chiding them with having failed to understand what they had investigated and learned. He felt that he had attained a novel and superior philosophic insight, and was setting forth truths that no one else had grasped.

**Obscurity of Style.** To clarify and restate these truths is difficult because of the obscurity of his style. Indeed in antiquity he was known as "the dark." This obscurity was probably in part deliberate, since it was fashionable in those days to write for the "intelligentsia," above the head of the ordinary man. However that may be, the fragments of Heraclitus "have first of all, a literal and often somewhat trivial meaning behind which, however, there looms an indefinite number of more general and also more profound meanings."<sup>2</sup> Furthermore, he illustrates his *logos* or discourse with startling paradoxes in which he seeks to drive home the point of his new discovery. Naturally his double meanings and his paradoxes have proved a happy hunting ground for commentators and interpreters who have perhaps credited him with much that never entered his head.

## III. RECONCILIATION OF IDENTITY, DIFFERENCE, AND CHANGE

**Identity of Opposites.** At the same time, he proclaims clearly enough the gist of his discovery. It is that *opposites are in reality identical* and that "all things are one."<sup>3</sup> Upon the existence of opposites and upon

<sup>1</sup> Fr. 114 (Burnet, p. 141).

<sup>2</sup> H. Gomperz, *Heraclitus of Ephesus*. Athens, 1939.

<sup>3</sup> Fr. 1 (Burnet, p. 132).



the tendency of phenomena in general to fall into groups of contrasted pairs he is even more insistent than Anaximander and the Pythagoreans. As we shall see in a moment, he expands indefinitely their lists of opposed entities. But whereas the Pythagoreans had regarded opposition as fundamental, and the members of Anaximander's pairs of opposites were essentially and irreconcilably *different* from each other, Heraclitus had discovered that *different things were also one and the same thing*. By this, however, he did not mean that *difference* is merely *apparent*, whereas *identity* is *real*. Difference and sameness are equally real, and where the one is, there must the other be also.

At first sight, it might appear that Heraclitus was merely reaffirming the doctrine of Thales and Anaximenes. For they, too, had proclaimed, implicitly at least, the identity of opposites and of all things, when they made Water and Vapor the stuffs of which all things were made. Why, then, should Heraclitus boast of the novelty of his doctrine?

We do not know what Heraclitus had to say about them, but we can see what he might have said. Thales and Anaximenes had taught that all things are *made* of one thing, to which opposites may be reduced. The hot and the cold, the light and the dark, etc., were both *Water* or both *Vapor*. To Heraclitus, however, it had occurred that all things *are* one thing, that they are *made*—not of Vapor or Water—but of *one another*, that the hot *is*—not Water or Vapor—but the cold, and *vice versa*, that light and dark are the same, not by virtue of being aspects or derivations of the same thing, but by virtue of being themselves the same thing.

**The Flux.** Again it is certain that *change* was very much on Heraclitus' mind, and that his new *logos*, in his opinion, accounted for its existence and nature—which other philosophers had left unexplained and inexplicable. To his eyes the universe was above all things a *process*, a *becoming*. In a famous fragment he tells us that "you cannot step into the same river twice, for fresh waters are ever flowing in upon you."<sup>4</sup> And later philosophers are unanimous in recording his insistence upon the moving, shifting, restless, transitory character of phenomena. "All things are in flux" became the tag universally attached to his system. Even if we do not credit him with the extreme views the phrase suggested to some of his successors—views that reduced the universe to a flux so rapid that you could not even step

<sup>4</sup> Fr. 41, 42 (Burnet. D. 136).

into the same river once—we can be sure that he was sure of the reality and central importance of *becoming* and of the necessity of finding a place for it in any philosophic system.

**The World-Stuff a Process.** Now reflection upon the nature of *change* might have suggested to Heraclitus that its reality depended upon a world-stuff that was *inherently* and *in and of itself* in a process of becoming, and whose essential nature lay in being both the *same as itself* and *different from itself*. For, in order to change, a thing must become *different* from itself. If it remains the *same as itself*, it has not changed. But also, after it has changed it must still be the *same* thing, otherwise there has been no change but simply the substitution of one object for another. A *changing* thing is, then, an *identity of opposites*. It both is and is not what it was and what it will be.

**Search for a Visibly Changing Stuff.** We must remind ourselves at this point that Heraclitus, like the Milesians, thought almost entirely in terms of sense-perception. Hence in facing and attempting to solve these problems, he had, like them, at his command only *perceptible* substances, qualities, and changes. Moreover, the line between qualities and things was thinly drawn. Philosophy knew nothing as yet of what we should call chemical and physical substructures and processes. To be sure, thinking in terms of the imperceptible was not far off, but in Heraclitus' day it had not arrived. Still further away were philosophic concepts like that of a substance or substructure to and from which qualities attached and detached themselves without altering its essence.

For him, then, as for the Milesians, the world-stuff did not underlie phenomena and exist, so to speak, at a deeper and more fundamental level than they did. It existed on the same perceptible level as other sensible substances, and its claim to be the one substance of which all others were made, lay in the fact that it was the *only* substance that could be seen by the naked eye undergoing transformation into them. Heraclitus' universe, like that of the Milesians, was, so to speak, without depth. His problem was to find among sensible phenomena something that actually *displayed* both identity and difference, and was *perceptibly* a stuff that was also a process rather than one like Water, or Vapor, or the Indeterminate, which was not visibly in a state of continuous transformation and *becoming*, but apparently at times inert and unchanging.

Any *real* transformation of such stuffs or principles into a universe was impossible—not to speak of a transformation undertaken at their own initiative and expressive of their nature. They could be trans-

formed, to be sure, but they were not themselves processes of transformation. The only possible world-stuff was one whose *being* lay in *becoming*.

**Discovery of this Stuff in Fire.** This was the *logos* other philosophers had not understood and even now could not understand. Their blindness now was all the more inexcusable, Heraclitus thought, because the truth of his *logos* was palpable. The real world-stuff, the stuff whose *being* lay in *becoming*, the stuff that was both *identical* and *different*, that was itself when in the act of becoming not itself, and that was ever changing and yet ever the same, was all about them, perceptible to eye and touch. It was *Fire*.

#### IV. THE EVER-LIVING FIRE

**Fire a Process.** *Fire* was always "on the go," flickering, flaring, waxing, waning, flaming hotter and brighter, dying down and cooling to glowing embers. Still, brighter or dimmer, hotter or cooler, it was the same *Fire*. We could see it burning up all sorts of things and apparently transforming them, in the process of combustion, into itself. We could see it becoming in that process embers and ashes, and smoke and vapor. *Fire* was just combustion, and combustion was conversion. Its burning, which was its substance, was a changing of things different from itself into itself, and of itself into things different from itself, throughout which it remained the same self-identical *Fire*. Here, then, in *Fire* we had a world-stuff whose distinctive nature, unlike that of *Water* or *Vapor*, would be just to change of its own initiative into a universe, without losing its own identity or changing its own character in the process. Since its nature was a process of transformation, it was not transformed by being transformed.

These, of course, are not reasons that Heraclitus himself gave as inspirations of his discovery. They are our reasons for feeling that he had good reason to believe his *logos* true and novel. Still, it is not improbable that some of these considerations influenced his train of thought.

**Fire the World-Stuff.** But, however Heraclitus was led to his conclusion, it is that "this world, which is the same for all, no one of gods or men has made; but it was ever, is now, and ever shall be an ever-living *Fire*, with measures of it kindling and measures going out. All things are an exchange for *Fire*, and *Fire* for all things, even as wares for gold, and gold for wares."<sup>5</sup>

<sup>5</sup> Frs. 20, 22 (Burnet, pp. 134, 135).

Whether Heraclitus thought of Fire in terms primarily of heat or of light is an interesting question. We generally visualize fire, but as the process of combustion which constitutes its essence, and in which it is exchanged for other things and other things for it, is associated with its heat rather than with its light, it may be that Heraclitus considered its tactual quality primary, and its brightness as something secondary and derivative.<sup>6</sup>

Heraclitus regarded Fire as animate, and as the principle of animation—of soul—of all living things. And, like the Milesians, he regarded the world-stuff as divine, and like Xenophanes, called it God.

**Fire an Identity of Opposites.** That it is a process of becoming in which opposites are identical, and sameness and difference are merged, he emphasizes at some length.

Fire is want and surfeit. Fire lives the death of air, and air lives the death of fire; water lives the death of earth, earth that of water.

God is day and night, winter and summer, war and peace, surfeit and hunger. . . .

Cold things become warm, and what is warm cools; what is wet dries, and the parched is moistened. . . .

It scatters and it gathers; it advances and retires.

The straight and the crooked path of the fuller's comb is one and the same.

Couples are things whole and things not whole, what is drawn together and what is torn asunder, the harmonious and the discordant. The one is made up of all things, and all things issue from the one.

To God all things are fair and good and right but men hold some things wrong, and some right.

Good and ill are one.

Mortals are immortals, and immortals are mortals, the one living the others' death, and dying the others' life.

And it is the same thing in us that is quick and dead, awake and asleep, young and old; the former are shifted and become the latter, and the latter in turn are shifted and become the former.<sup>7</sup>

## V. THE LAW OF CHANGE

**Orderly Behavior of the Universe.** But the discovery of a world-stuff that solves the problem of change and of the identity of opposites implied in change, was by no means the whole of Heraclitus' novel *logos*. He had discovered something else, which also, in his opinion,

<sup>6</sup> On this point cf. H. Gomperz, *op. cit.*, p. 55.

<sup>7</sup> Frs. 24, 25, 36, 39, 40, 50, 57, 59, 61, 67, 78 (Burnet, pp. 135-139).

lay plain as day to anyone who would use his powers of observation and would reflect upon what he observed. The exchanges of Fire for all things and of all things for Fire are not haphazard and capricious. They follow a fixed rule and exhibit a fixed order. The ever-living Fire displays an invariable habit of transformation, and its behavior can be summed up and described in a definite *formula*. In short, there is a *Law of Change*, which makes the world-process an intelligible and rational affair.

The orderly character of the transformation that constitutes the world-process is called by Heraclitus a kind of *wisdom* inherent in the world-stuff. And the fact that this characteristic designates a pattern and rule of behavior common to all things alike, displayed everywhere and at all times by the universe, is expressed by his saying that "The wise" is something different from any of the phenomena that exemplify it. It is, however, not one of a pair of different, opposed entities like day and night, summer and winter, war and peace, but is itself present in all opposites, harmonizing them, and governing their transformations into one another, as "the thought by which all things are steered through all things."<sup>8</sup> It seems, then, to be, like Fire, the one thing that is not transformed in the process of transformation. In a word, the Law of Change does not change. "The wise is one only. . . ." Furthermore, Heraclitus adds, "it is willing and unwilling to be called by the name of Zeus."<sup>9</sup>

**Difficulties of a Theistic Interpretation.** This ascription of wisdom and thought, or "insight," to the ever-living Fire not unnaturally suggests a theistic interpretation, which some later commentators adopted. Such an interpretation, however, is now rejected by many scholars, who believe that Heraclitus was merely distinguishing in his way what we should today call the form or order of the universe from its stuff. "The wise" is the lawfulness and intelligibility exhibited by the ever-living Fire. It does not exist apart from the world-stuff, but in the world-stuff as the unvarying habit of its behavior. Its willingness to be called Zeus is simply an affirmation that the Law of Change in the ever-living Fire is divine; its unwillingness to be called Zeus is perhaps a warning that the divine law like the divine world-stuff is not a god, after the personal style of the Olympian deities.<sup>10</sup>

**Use of the Political Analogy.** However, Heraclitus would seem to conceive the law and order in the universe after the political and legal analogy. For that matter, we today still speak of natural laws as laws

<sup>8</sup> Fr. 19 (Burnet, p. 134).

<sup>9</sup> Fr. 65 (Burnet, p. 138).

<sup>10</sup> Cf. H. Gomperz, *op. cit.*, p. 60.

*governing* the behavior of phenomena, as if they *prescribed* rather than simply *described* the general course events follow and the conduct common to and universally characteristic of them. But whereas we have become aware that we are speaking metaphorically, Heraclitus undoubtedly felt that the Law of Change really *directed* and *controlled* the world process, much as the laws of a city compel and control the actions of its citizens.<sup>11</sup>

Any deviation from the universal law would, moreover, be a kind of immorality on the part of phenomena, analogous to human disobedience to civic rules and regulations. It would upset the order of the universe just as lawlessness among human beings would upset the constitution of the city-state. And just as infraction of civil and moral regulations is rectified, and the stability of the body politic is restored, by punishment, so wayward phenomena will be overtaken by a cosmic retribution. "The sun," we are told, "will not overstep his measures; if he does, the Erinyes, the handmaids of Justice, will find him out."<sup>12</sup> To act *justly*, he must mete out day and night, summer and winter, according to their established measures and the law of their alternation. In the same way, the general rhythmic pulsation and alternation of opposites in which Fire now scatters, now gathers, now advances, now retires, throughout the entire universe, was subject to a just measure, to exceed or disturb which would somehow be a *wrong* that deserved to be chastised. Anaximander, it will be remembered, also spoke of the world-process in terms of injustice and reparation.

**The Logos.** The word "logos" is never used by Heraclitus to designate the Law of Change, at least in any of the fragments that have been preserved. Nor is there any certain evidence that he ever so used it. In any case, in the Greek of his time the word had no metaphysical significance, and signified "discourse" or "teaching." Hence, if he did use it, he could have meant by it no more than he meant by "wisdom" and "the wise." However, later philosophers used the word metaphysically to designate a divine, personal or quasi-personal Reason immanent in the universe and directing the world-process. And in this sense it was read back into Heraclitus. Hence we must be prepared to hear the law and order inherent in the transformations of the ever-living Fire frequently referred to as the Heraclitean Logos, and sometimes invested with the attributes of a personal God.

However, this misunderstanding really makes Heraclitus in a sense, at least, one source of the doctrine of the Logos. In the meaning given

<sup>11</sup> Cf. Fr. 91b (Burnet, p. 139).

<sup>12</sup> Fr. 29 (Burnet, p. 135).

the term by the Stoics and read back into him, the word was used also by some of the Neo-Platonists to designate the Divine Intellect, and was taken over by the author of the Fourth Gospel to describe what later became the second person of the Christian Trinity. Whether, however, the author in using it was influenced directly by contemporary Graeco-Roman philosophy, or indirectly through the Hellenizing Jews, or applied the term to a purely Hebrew concept, is an open question.<sup>13</sup>

#### VI. THE UPWARD AND THE DOWNWARD WAY

**Statement of the Law of Change.** What now is the nature and law of the world-process? In the first place, Fire is always varying in intensity, becoming hotter and colder "with measures of it kindling and measures going out." And the contrast and conflict of opposites reflects the fundamental opposition of Fire flaring up and Fire dying down. In a word, Fire ceaselessly travels an Upward and a Downward Way. But "the way up and the way down is the same,"<sup>14</sup> because Fire is always both kindling and going up and also going out and down. Again, the kindling and cooling expresses itself in a rhythmic alternation in the world-process. Fire is burning more hotly in day, and summer, and life, and waking, less hotly at night, and in winter, and death, and sleep. But day and night, summer and winter, waking and sleeping, living and dying, succeed each other in perpetual recurrence, as Fire now flares up, now dies down.

The measures of some of the rhythmic alternations of the Upward and the Downward Way, Heraclitus appears to have computed in a somewhat "numerological" fashion. Attaching special importance to the number seven, he, seemingly, tried to relate it to the number thirty—thirty days being the period of the waxing and waning of the moon, and thirty years being regarded by him as the period of a human generation. Also he felt, apparently, that the so-called Great Year, a period of 10,800 years, played some part in the rhythmic process. But this is all really very obscure. It is also a question whether he believed in recurrent world-conflagrations in which all things are destroyed by Fire and resolved into it and then re-created, or held that the Upward and the Downward Ways are always both in operation and everlastingly counterbalance one another.

<sup>13</sup> Cf. Burnet, p. 133, *note*.

<sup>14</sup> Fr. 69 (Burnet, p. 138).

## VII. "WAR IS THE FATHER OF ALL"

**Stability Rests on Tension.** "Homer was wrong in saying: 'Would that strife might perish from among gods and men!' He did not see that he was praying for the destruction of the universe; for, if his prayer were heard, all things would pass away. . . .

"War is the father of all and the king of all; and some he has made gods and some men, some bond and some free. . . . We must know that war is common to all, and strife is justice, and that all things come into being and pass away through strife."<sup>15</sup>

In these fragments Heraclitus expresses in vivid language his theory that the universe is kept in existence by a kind of *tension* or *struggle* between the Upward and the Downward Ways. Upon this strife of opposites the stability and structure of the universe depends, just, we might say, as the rigidity, or the slow swaying, of a pair of wrestlers is due to the effort either one is making to throw his opponent. Tension, then, constitutes equilibrium, and equilibrium is tension. Stability is instability, and instability is stability. Things hold together because they are held together. War is the same as peace, peace is the same as war. Harmony and discord are identical. "Men do not know how what is at variance with itself agrees with itself. It is an attunement of opposite tensions, like that of the bow and the lyre,"<sup>16</sup> in which one and the same string pulls in two opposite directions at the same time. The structure of the universe is a *taut* structure. "It rests by changing."<sup>17</sup> But "the hidden attunement is better than the open."<sup>18</sup> It is more perfect than that of the bow or the lyre, or of any other of its visible examples.

## VIII. THE GENERATION AND STRUCTURE OF THE UNIVERSE

**Cosmology.** Our material for reconstructing Heraclitus' theory of the generation and structure of the universe in any detail is somewhat scanty. Heraclitus himself tells us that "the transformations of Fire are first of all sea; and half of the sea is earth, half whirlwind,"<sup>19</sup> by which he means apparently either a hurricane attended by waterspouts and thunder storms, or exhalations of shimmering vapor from the sea.

<sup>15</sup> Frs. 43, 44, 62 (Burnet, pp. 136-137).    <sup>18</sup> Fr. 47 (Burnet, p. 136).

<sup>16</sup> Fr. 45 (Burnet, p. 136).

<sup>19</sup> Fr. 21 (Burnet, p. 135).

<sup>17</sup> Fr. 83 (Burnet, p. 139).



Whether this fiery phenomenon, whatever it may be, is to be regarded as Fire descending into sea, or sea ascending into Fire, seems to be a disputed point. In any case, half of the sea ascends firewards, and half of it changes into earth, and water is equally both changing into fire and into earth. Earth is both downwardly precipitated from water, and upwardly resolved back into water, as it returns by the Upward Way of water to the Fire, from which by the Downward Way of water it is derived. An early historian of philosophy, Diogenes Laertius, also tells us that Heraclitus said that Fire becomes water, water earth, earth water again, and that water evaporates in bright exhalations that nourish Fire.

#### IX. THE PHYSICAL WORLD

**Astronomy.** We have already seen that Heraclitus draws largely upon physical phenomena, particularly those of astronomy and meteorology, to illustrate his *logos*. But for a more specific and coordinated description of his views of the structure of the physical universe we have to rely largely upon later commentators. We can perhaps do no better than quote the account given by Diogenes Laertius.

He held, too, that exhalations arose both from the sea and the land; some bright and pure, others dark. Fire was nourished by the bright ones, and moisture by the others.

He does not make it clear what is the nature of that which surrounds the world. He held, however, that there were bowls in it with the concave sides turned towards us, in which the bright exhalations were collected and produced flames. These were the heavenly bodies.

The flame of the sun was the brightest and warmest; for the other heavenly bodies were more distant from the earth; and for that reason gave less light and heat. The moon, on the other hand, was nearer the earth; but it moved through an impure region. The sun moved in a bright and unmixed region and at the same time was at just the right distance from us. That is why it gives more heat and light. The eclipses of the sun and moon were due to the turning of the bowls upwards, while the monthly phases of the moon were produced by a slight turning of its bowl.

Day and night, months and seasons and years, rains and winds, and things like these were due to the different exhalations. The bright exhalation, when ignited in the circle of the sun, produced day, and the preponderance of the opposite exhalations produced night. The increase of warmth proceeding from the bright exhalation produced summer, and the multiplication of moisture from the dark exhalation produced winter. He assigns the causes of other things in conformity with this.

As to the earth he makes no clear statement about its nature, any more than he does about that of the bowls.<sup>20</sup>

**Sensible Evidence of the Transformations of Fire.** To this we might add that probably Heraclitus, like his predecessors, thought that we could actually perceive water turning into earth in the silting of the mouths of rivers, and earth turning back into water in the springs issuing from the ground. Together with the heavenly bodies, the shimmering exhalations from the sea, waterspouts, and the electric disturbances frequently accompanying them, they gave him a complete visible demonstration of the entire cycle of the Upward and the Downward Ways.

#### X. THE SOUL

**Psychology.** Fire, we may remember, is animate and the principle of life in all living things. Our souls, then, are the element of pure Fire in us—or, in other words, that part of us which is hottest and in the most intense combustion. The hotter and the more intense that process is, the better are our minds and characters. "The dry soul is the wisest and the best."<sup>21</sup> Any dulling of the soul is due to its becoming damper, when the Downward Way towards water preponderates in its Fire. Thus drunkenness and sleep are moderate dampenings of the soul, in which we lose hold of the real, waking world. "The waking have one common world, but the sleeping turn aside, each into a world of his own."<sup>22</sup> And in our cups it is hard to conceal folly.<sup>23</sup> Pleasure, too, is a moistening, perhaps because its pursuit is a lapse from wisdom. And when the Downward Way prevails as far as it can, and the Fire in us becomes water, then we die, and all that is left of us is the water and earth of which our bodies are composed.

**Possible Belief in Immortality.** But there is also the reverse process of the Upward Way in us. When we sober up or wake up in the morning, the Fire in us which has been undergoing a minor setback, rekindles. Also, it has been suggested that Heraclitus thought we could, so to speak, die upwards as well as downwards, in which case our souls became purer fire. Deaths such as this are perhaps the "greater deaths" that win "greater portions."<sup>24</sup> Then, too, the statement that "mortals are immortals and immortals are mortals, the one living the others'

<sup>20</sup> Diogenes Laertius (trans. Burnet, pp. 147-148).

<sup>21</sup> Frs. 74-76 (Burnet, p. 138).

<sup>22</sup> Fr. 95 (Burnet, p. 140).

<sup>23</sup> Cf. Frs. 108, 109 (Burnet, p. 140).

<sup>24</sup> Fr. 101 (Burnet, p. 140. Cf. pp. 153-154).

death, and dying the others' life,"<sup>25</sup> might mean that human souls on the Upward Way finally become so fiery that they die to the body and become gods, and that gods, when the Downward Way prevails in them, and they descend towards the earth and become cooler, become human souls.<sup>26</sup> This smacks of Orphic-Pythagorean doctrine.

In any case, however, soul that dies downwards into water is being also continually raised again from the dead. For after the death of soul by becoming water, and the death of water by becoming earth, "water comes from earth" again "and from water, soul," as the Upward Way reasserts itself. For "it is the same thing in us that is quick and dead, awake and asleep, young and old; the former are shifted and become the latter, and the latter in turn are shifted and become the former."<sup>27</sup> Hence "you will not find the boundaries of soul by traveling in any direction, so deep is the measure of it."<sup>28</sup> Wherever Fire is, there it is also.

**Intelligence a Degree of Heat.** In its fiery, waking state the soul is rational and wise. For Fire, as we may remember, is infused with "the wise," or, in other words, is an orderly process, the behavior of which exhibits and is governed by fixed habits and rules. Hence, in proportion as soul is hot and dry, its waking life, also, is infused with "the wise," and governed by reason. Furthermore, in proportion as this state prevails, soul not only perceives the sensible phenomena of the process of combustion—which it may do even when moistened by drunkenness and sleep—but is aware of "the wise," that is, of the orderly and intelligible character of the process. Dry soul is an *understanding* of the world.

But even in the driest and wisest human soul Fire is not at its hottest and its brightest, and man's understanding of the world-order falls far short of grasping the whole nature and law of change and of exhausting their capacity for being understood. At any rate, we are told that "the way of man has no wisdom, but that of God has. Man is called a baby by God, even as a child by a man. The wisest man is an ape compared to God, just as the most beautiful ape is ugly compared to man."<sup>29</sup>

<sup>25</sup> Fr. 67 (Burnet, p. 138).

<sup>26</sup> Cf. H. Gomperz, *op. cit.*, p. 66.

<sup>27</sup> Fr. 78 (Burnet, p. 139).

<sup>28</sup> Fr. 71 (Burnet, p. 138).

<sup>29</sup> Frs. 96-99 (Burnet, p. 140).

## Chapter VI

# THE ELEATICS

### I. PARMENIDES

The conclusion reached by Heraclitus encountered the violent opposition of Parmenides of Elea, or Velia, a city south of present-day Naples, not far from Paestum. Born of a rich and powerful family, and himself a person of political prominence, he "flourished" early in the fifth century B.C. Plato tells us that he visited Athens at the age of sixty-five and was interviewed by the youthful Socrates. And he enjoyed a great reputation in antiquity. His first philosophical instruction was received apparently from the Pythagoreans.

**The Way of Truth.** Hitherto philosophers had merely announced their theories and let them go at that. But Parmenides supports his with logical reasoning. He uses hexameter verse to convey his argument and entitles his work *The Way of Truth*. His primary care is to lay down the rules of the game. Reason is the ultimate judge of truth, and where and when the senses conflict with it, their evidence must be false. Moreover, it is a fundamental law of thought that a self-contradictory concept cannot be valid.

**Change Logically Impossible.** Proceeding on these premises, Parmenides launches an attack on the reality of *change*. It may be that this attack was directly inspired by the teaching of Heraclitus. In any case, it seems to have been directed against him, in part at least, although it would apply equally to all earlier Greek philosophy, which had taken *change* for granted, without, however, analyzing its implications as Heraclitus had done. The gist of Parmenides' criticism was that a thing cannot both be itself and not itself, as Heraclitus had explicitly maintained in his doctrine of the identity of opposites, and as the Milesians had implicitly taught in their theories of a single homogeneous world-stuff turning into a multiple, heterogeneous universe. "Undiscerning crowds," he exclaims, "who hold that it is and is not the same and not the same; and that all things travel in opposite directions."<sup>1</sup> *A thing must either be or not be.* There is no middle

<sup>1</sup> Fr. 6 (Burnet, p. 174).

way. Furthermore what *is*, cannot change. Hence change cannot *be*, but is non-existent.

**The Unity, Self-identity and Changelessness of the Real.** From these premises Parmenides deduces that the existent, the Real, or as Parmenides calls it, *what is*, must be one, eternal, illimitable, homogeneous, without multiplicity or variety of any sort, and devoid of motion or alteration. Logic demands this, as we shall see in a moment, and where logic conflicts with the testimony of the senses, the senses are wrong. Multiplicity, variety, generation and destruction, change of any sort, are deceitful opinions we entertain about the universe, not the truth. The sensible world does not *really* exist. It is a false appearance only.

This thesis Parmenides defends at length. The existent, he tells us, cannot be conceived as coming into being or passing out of being. "There are very many tokens that what is, is uncreated and indestructible; for it is complete, immovable, and without end. Nor was it ever, nor will it be; for now *it is*, all at once, a continuous one. For what kind of origin for it wilt thou look for? In what way and from what source could it have drawn its increase? . . . I shall not let thee say nor think that it came from what is not; for it can neither be thought nor uttered that anything is not. And if it came from nothing, what need could have made it arise later rather than sooner?" Moreover, how "can what *is* be going to be in the future? Or how could it come into being? If it came into being, it is not; nor is it, if it is going to be in the future. Thus is becoming extinguished and passing away not to be heard of.

"Nor is it divisible, since it is all alike, and there is no more of it in one place than another to hinder it from holding together, nor less of it, but everything is full of what is. Wherefore it is wholly continuous, for what is, is in contact with what is.

"Moreover it is immovable. . . . It is the same and it rests in the self-same place abiding in itself. And thus it remaineth constant in its place." It cannot be "infinite; for it is in need of nothing, while if it were infinite, it would stand in need of everything."

Finally, thinking depends upon the existent and cannot be set up as a separate principle. "The thing that can be thought and that for the sake of which the thought exists is the same, for you cannot find thought without something that is, as to which it is uttered. And there is not, and never shall be, anything besides what is, since fate has chained it so as to be whole and immovable."<sup>2</sup>

<sup>2</sup> Fr. 8 (Burnet, pp. 174-176).

**Change, Variety, etc., Are False Opinions.** Hence, Parmenides concludes, multiplicity, variety, motion, transformation, generation and destruction are erroneous human opinions regarding the nature of the Real. "All these things are but names which mortals have given, believing them to be true—coming into being and passing away, being and not-being, change of place and alteration of bright colour."<sup>3</sup>

At the same time, Parmenides asserts that the truly existent is corporeal. It is extended, solid, and continuous, contiguous with itself, a *plenum*, and spherical in shape. "Since . . . it has a furthest limit, it is complete on every side, like the mass of a rounded sphere, equally poised from the center in every direction; for it cannot be greater or smaller in one place than in another. For there is no nothing that could keep it from reaching out equally, nor can aught that is more here or less there than what is, since it is all inviolable. For the point from which it is equal in every direction tends equally to the limits."<sup>4</sup>

**Summary of the Nature of the Real.** In short, we may picture *what really is*, all sensible evidence and human opinions to the contrary notwithstanding, as a single, eternal, solid, absolutely compact, motionless, changeless ball of completely transparent and homogeneous world-stuff, without crack or flaw or differentiation or quality of any sort within its substance. There is not even nothing—in the sense of a void or emptiness—outside and beyond and surrounding this ball, since there is no such thing as nothing or emptiness or a void. Logic, in Parmenides' opinion, demands that we so picture it, and there is no gainsaying logic.

**The Way of Opinion.** To *The Way of Truth*, Parmenides adds a *Way of Opinion*, which gives us a picture of the nature of the universe, such as might be inspired from an unreasoned observation of sensible phenomena. "Henceforward learn the beliefs of mortals, giving ear to the deceptive ordering of my words." Of this "deceptive ordering" we possess only a few scattered fragments—which, however, we may eke out with reports given of his views by other Greek philosophers. The picture thus pieced together is influenced by the cosmology of the Pythagoreans, from whom, it will be remembered, Parmenides received his first philosophic instruction.

"Mortals," he tells us, "have made up their minds to name two forms . . . opposite in form, and have assigned to them marks distinct from one another. To the one they allot the fire of heaven, gentle, very light. . . . The other is just the opposite to it, dark night, a

<sup>3</sup> *Ibid.*

<sup>4</sup> *Ibid.*

compact and heavy body.”<sup>5</sup> Of these two, light and dark night, all things are compounded. The universe is a series of concentric bands or rings, of which the outer one, which walls in the world, and the inner one at its center—the earth—are composed of the dark solid principle. Between these revolve rings of mingled light and darkness, possibly also interspersed with rings of pure fire and pure darkness—though the point is obscure. The heavenly bodies, apparently, are light shining out of the mixed rings—which reminds us of Anaximander. The revolution of the mixed rings is the source of motion and change in the universe. Somewhere in the universe there resides a “divinity that directs the course of all things”—Necessity—who contrived Eros, the first of all the gods, from whom the succeeding generations of the gods proceeded.<sup>6</sup>

We have also one fragment dealing with thinking and knowledge. “Just as thought stands at any time to the mixture of its erring organs, so does it come to men; for that which thinks is the same, namely, the substance of the limbs, in each and every man; for their thought is that of which there is more in them.”<sup>7</sup> And we are told by a later commentator, Simplicius, that Parmenides believed that men were wise or foolish according as the principle of light or that of darkness was preponderant in the composition of their bodies.

**Possible Reasons for Adding the “Way of Opinion.”** Why Parmenides wrote a *Way of Opinion* and expounded a theory of the universe he believed to be false has perplexed commentators both ancient and modern. It has been said that he meant to set forth and systematize the vulgar views “of the many”; that he was seriously describing the structure of the world of appearance, much as Kant and Spencer in modern times discussed the principles and laws by which phenomena are governed, while maintaining that the nature of Reality is inscrutable and unknowable; and that he was setting forth Pythagorean views, accepted by himself in his youth, but now rejected, for the express purpose of acquainting his disciples with, and warning them against, his earlier opinions.<sup>8</sup>

**Parmenides’ Influence.** The reasoning of Parmenides seems to have created a stir in the contemporary philosophic world, and it continued to exert considerable influence, direct or indirect, on subsequent Greek thinking. There is ground for believing that the Pythagoreans retorted immediately by attempting to show that his concept of the absolute unity and homogeneity of Being was as self-contradictory and mathe-

<sup>5</sup> Fr. 8 (Burnet, p. 176).

<sup>7</sup> Fr. 16 (Burnet, pp. 177-178).

<sup>6</sup> Frs. 12, 13 (Burnet, p. 177).

<sup>8</sup> On this point, cf. Burnet, p. 182 ff.

matically impossible as he had tried to prove the concept of multiplicity to be. And apparently, a generation later, Empedocles and Anaxagoras and Leucippus, to whom we shall come in the next chapter, while accepting in the main Parmenides' logic and his conclusions regarding the nature of the Real, attempted also to save the reality of the sensible world and of its apparent multiplicity, variety, motion and change by means which we shall presently describe. Indeed, it has been suggested that the arguments of Parmenides' disciple, Zeno, were a counter-blast to the Pythagorean attack on his master's teaching, and that another disciple, Melissus, was largely concerned to show that the compromises suggested by Empedocles and Anaxagoras would not hold water.<sup>9</sup> To the teachings of these disciples we now turn.

## II. ZENO

**Originator of Dialectic.** Zeno (b. at Elea circ. 490 B.C., d. circ. 430 B.C.), who succeeded Parmenides as head of the Eleatic School, initiated a new form of logical argument. It consisted in admitting for the moment the truth of the views of one's opponent, and then developing the logical absurdities of his position. This method of argument, called by the Greeks "dialectic," was used by Socrates in his development of a position by question and answer, and was perfected as a literary as well as a logical device by Plato, who also used the word to describe reasoning about first principles.

**Absurdities in the Conception of the Real.** Suppose, says Zeno, that Reality instead of being one and unbroken, as Parmenides asserted, is really broken into many parts. In that case, it will have to be both finite and infinite—which is absurd. On the one hand, it must be composed of a finite number of indivisible parts, if we are to talk of real, ultimate parts at all. But, on the other, every part must be conceived as divisible into smaller parts, and so on *ad infinitum*. Again, the Real must be thought of as both infinitely large and infinitely small. If composed of indivisible parts it must be infinitely small, since its parts, to be conceived as indivisible, must be conceived as without magnitude. But if it is infinitely divisible, it will have an infinite number of parts and therefore will be infinitely large. Finally, the total effect of a Reality that is many ought logically to be no more than the sum of the separate effects produced by its different parts. And yet, drop a single grain of millet seed and you will not hear it.

<sup>9</sup> On these points, cf. Burnet, *op. cit.*, pp. 314, 328; H. Cherniss, *Aristotle's Criticism of Presocratic Philosophy*, pp. 398, 402 ff.



But drop a whole bushel and there will be a noise. How is this possible? How can a noise be a sum total of silences? How can the audible be composed of inaudible parts? It cannot. A Reality, therefore, made up of many parts is once more shown to be logically self-contradictory.<sup>10</sup>

Or, take Parmenides' theory that Reality is a sphere outside of which there is no space. Suppose that he is wrong, as the Pythagoreans were arguing, and that such an external space does exist. This space, once that we are outward bound, will require another space to contain it, and so on *ad infinitum*. But in that case we shall never reach a final space which contains all things. We shall simply go on and on, looking for the space in which all things exist—that is, for real space—and never finding it. The notion, then, of infinite space is at least as absurd as the Parmenidean conception of a finite, spherical space, if not more so.<sup>11</sup>

**Paradoxes Proving Motion Inconceivable in a Pluralistic Reality.** Finally Zeno points out that motion is by no means saved by supposing that Being is multiple and made up of parts. On the contrary, it remains as self-contradictory and logically impossible in a world in which multiplicity is real, as it is in the Parmenidean concept of the nature of Reality. To drive home the inconceivability of motion in a universe that is divisible into many units, he brings forward four paradoxes.

In the first place it will prove impossible to pass from one fixed point to another, as, for example, to cross a race-course. For to traverse any given distance, you must first traverse half of it, and again half of that half and so on *ad infinitum*. Since the space you must traverse will, on the pluralistic hypothesis, be infinitely divisible, you can never come to the end of it; and it will always separate you, by however infinitesimal an amount, from your goal.

Again, Achilles, however swiftly he may run, can never overtake the tortoise. For by the time he has reached the place from which the tortoise started, the tortoise will have covered some ground. And by the time Achilles himself has traversed the same ground, the tortoise will have traveled a little further. And so on, once more *ad infinitum*, with Achilles always gaining, but the tortoise always ahead.

Or, take the arrow apparently in flight. In reality it is at rest. For at every moment in its flight it must be occupying a space equal to itself. But when anything is occupying a space equal to itself it is at rest.

<sup>10</sup> Cf. Frs. 1, 2, 3 (Burnet, pp. 315-316). Simplicius, 255 (trans. Fairbanks, *The First Philosophers of Greece*, p. 117).

<sup>11</sup> Cf. Burnet, p. 317.

Finally, let us suppose three lines of an equal number of bodies, say chariots, on the track of a stadium. One line is stationary, the other two, equally distant from it, are approaching it from opposite directions with equal speeds. Hence both the moving lines will take the same number of moments to pass it. But in so doing, either moving line will pass twice as many chariots in the line going in the opposite direction as it does in the line of chariots at rest. In short the moving lines will pass each other twice as fast as they do the stationary line. In that case at any given moment they will both be moving with two different speeds one of which is half or twice the other, according as we look at it. Hence we are obliged to say that each of the moving chariots is going at every moment both twice and half as fast as it is moving at that moment—which is absurd. It is, then, as logically impossible to move from one moment to another as it is to move from one point in space to the next.<sup>12</sup>

All in all, Zeno concludes, no matter from what angle we view the problem, those who maintain that the Real is a moving Many make certainly no more sense, and, if anything, much less sense, than those who assert that the Real is a motionless indivisible One.

**Persistence of the Paradoxes till Modern Times.** These paradoxes remained unsolved by mathematics and logic for some twenty-two hundred years. As long as space and time were conceived as divisible *ad infinitum* into discrete points and instants, no way of satisfactorily answering them could be found. It is only recently that a solution has been offered by new mathematical theories regarding the nature of the infinitesimal, the infinite, and the continuous from which the notions of discreteness and infinite divisibility have been banished.<sup>13</sup>

### III. MELISSUS

The last important member of the Eleatic School was Melissus of Samos, a somewhat younger contemporary of Zeno's. He was a prominent statesman, and, as admiral of the fleet during the rebellion of Samos against the Athenian Empire, he inflicted a defeat upon the enemy forces, which happened at the moment to be commanded by the poet Sophocles.

**Attack on Anaxagoras.** By this time the philosophers Empedocles and Anaxagoras had appeared upon the scene, both of whom, while

<sup>12</sup> For the paradoxes of Zeno, cf. Aristotle, *Phys.* VI, 9, 239 b.

<sup>13</sup> Cf. Russell, *Mysticism and Logic*, Chap. V.

in agreement with Parmenides' conclusions regarding the nature of Reality, were trying to reconcile with them the multiple, variegated, moving and changing characteristics it seemed to exhibit. This they were doing by breaking up the Real into a number of elementary substances, each one of which complied with Parmenides' specifications, except for that of immobility, and by attributing variety and alteration to different mixings of these primary elements. They both followed Parmenides, however, in maintaining that there was no void and that the substances of which the Real was composed were completely compacted, with no empty space between them.

**Reiteration of Parmenides' Argument.** The arguments of Melissus, as we have already noted, seem to have been excited by and directed against these attempts at compromise—particularly, perhaps, by and against the system of Anaxagoras. Melissus reiterates the views of Parmenides. The truly existent must be one and continuous, without motion, alteration, development, divisibility, multiplicity or variety of any sort, and there can be neither more nor less of it. Moreover, even if the Real were multiple and composite, its constituent parts would have to be conceived along Eleatic lines as simple, unchanging, uncreated and indestructible units. By no stretch of thought could they be conceived as coming into being or ceasing to be, or growing out of anything else. This, incidentally, both Empedocles and Anaxagoras admitted.

But, continues Melissus, in that case there can be no mixings and rearrangements (such as Empedocles and Anaxagoras resorted to). For rearrangement is alteration, and, if it takes place, "then the real must needs not be all alike, but what was before must pass away, and what was not must come into being. . . .

"Further it is not possible that its order should be changed; for the order which it had before does not perish, nor does that which was not come into being. But since nothing is either added to it or passes away or is altered, how can any real thing have its order changed? For if anything became different, this would amount to a change in its order."<sup>14</sup>

**Motion Impossible Without a Void.** Again, if there is no void, and the Real is completely compact (as Empedocles and Anaxagoras admitted), how can the parts into which they divided the Real move and commingle? A compact Reality cannot move, "for it has nowhere to betake itself to, but is full. For if there were aught empty it would

<sup>14</sup> Fr. 7 (Burnet, pp. 322-323).

betake itself to the empty. But since there is naught empty, it has nowhere to betake itself to. . . . It must needs be full if there is naught empty, and if it is full it does not move."<sup>15</sup>

Furthermore, if the Real has many constituents, these constituents must be distinguishable and separated from one another. But to be separated they must have moved away from one another. Motion, however, is impossible. "If what is real is divided, it moves; but if it moves, it cannot be."<sup>16</sup>

**Change and Motion.** Finally things certainly seem to change into one another. If, however, this seeming transformation is *really* nothing but a rearrangement of unchangeable constituents, then transformation is no less unreal and illusory in a pluralistic Reality than it is in the Real of Parmenides.<sup>17</sup> The implication is perhaps that the pluralists have no reason for accepting the reality of motion when they do not accept the reality of change, and that, if they admit the unreal character of the one, they might as well admit the illusory nature of the other—in which case their systems fall to the ground.<sup>18</sup> For in any case they would not be seeing aright, since the many that we see would not be the many principles to which they reduce the multiplicity and variety of the sensible world. Hence they must admit that the plurality of the sensible world, as well as its apparent change, is a matter of false opinion. And when we examine the many principles or elements to which they reduce the multiplicity and variety of phenomena, we shall find that these elements are nothing but a multiplication of Parmenidean Ones. "So then, if there were many things they would have to be just of the same nature as the one."<sup>19</sup>

**Melissus on Infinity of the Real.** There was, however, one point in which Melissus differed from Parmenides. He denied that the Real was spherical in shape, and held that it "must ever be infinite in magnitude. But nothing which has a beginning or end is either eternal or infinite."<sup>20</sup> No void exists outside it to contain and limit it. It is then infinitely extended in space, just as it is without temporal beginning or end.

We pass now to the systems of Empedocles and Anaxagoras which Melissus seems to have been criticizing.

<sup>15</sup> *Ibid.* (Burnet, p. 323).

<sup>16</sup> Fr. 10 (Burnet, p. 324).

<sup>17</sup> Cf. Fr. 8 (Burnet, p. 323).

<sup>18</sup> On all these points, cf. Cherniss, *op. cit.*, pp. 402 ff.

<sup>19</sup> Fr. 8 (Burnet, p. 324).

<sup>20</sup> Frs. 3, 4 (Burnet, p. 322).

## *Chapter VII*

# THE PLURALISTS

### I. GENERAL CHARACTERISTICS

**Attempted Reconciliation of Sense-data with Logic.** The Pluralists, as we have already pointed out, all sought by one device or another to reconcile the reality of multiplicity, variety, and change with the existence of a world-stuff of whose essentially unchanging and unvaried nature the logic of Parmenides had convinced them. They all set about this task in the same way, though the details of their schemes differed greatly. They all smashed the Parmenidean sphere of motionless, simple, and single Being to bits, each one of which retained most or all of the Eleatic characteristics—eternity, indestructibility, simplicity, unalterableness, and the like. Then, affirming the possibility of change of place, though not of quality and nature, they proceeded to move these bits about in space, to fit them together in different ways, and to regard all seeming alteration as in reality merely a rearrangement of them in different proportions and figures. Thus apparent qualitative change did not affect or contradict the real, immutable being of the particles of world-stuff, although there was a real change in their external and spatial relations to one another.

### II. EMPEDOCLES

**Life.** The first of these philosophers, Empedocles, was born at Agrigentum in Sicily about 490 B.C., and died in southern Italy or Greece about 435 B.C. He came of one of the richest and most aristocratic families of his native city. His father was one of the leaders of the recently established democratic government there, and Empedocles himself, for a while, exerted great political influence. He was also a doctor and a scientist as well as a philosopher, and was much under the spell of the religious beliefs of the Pythagoreans and the Orphics. Like Pythagoras, he was credited with supernatural powers, in his possession of which he himself apparently believed. And there were stories that instead of dying, he disappeared at the summons of a great

voice and in the midst of a great light from heaven. Other sensational reports had him jump into the crater of Etna, hang himself, be killed by falling out of a chariot, and die by drowning. Abundant fragments of his writings have come down to us. They are couched in a somewhat florid hexameter verse, in which it is sometimes difficult to disentangle fact from poetic license.

**Attack on Current Theology.** Like Xenophanes, Empedocles revolted against the orthodox Greek theology with its gods created in man's own image. And like Xenophanes and his other predecessors he transferred the idea of the divine to the world-stuff:

"It is not possible," he tells us, "to set God before our eyes or lay hold of him with our hands, which is the broadest way of persuasion that leads into the heart of man.

"For he is not furnished with a human head on his body, two branches do not sprout from his shoulders, he has no feet, no swift knees nor hairy parts; but he is only a sacred and unutterable mind flashing through the whole world with rapid thoughts."<sup>1</sup> The gods of the popular theology may exist, to be sure. Empedocles speaks of them, and uses their names to designate and symbolize natural forces and elements. But they are sprung from the same elements and produced by the same forces as have brought the rest of the world into being. "For out of these (sources) have sprung all things that were and are and shall be—trees and men and women, beasts and birds and the fishes that dwell in the waters, and the gods that live long lives and are exalted in honour."<sup>2</sup>

This description of God as "a sacred and unutterable mind" should in the opinion of many scholars not be interpreted in a monotheistic or personalistic way. For, in the philosophic portion of his poem he speaks of the universe as God, and of its constituent elements as divine, and tells us that mind and thought are a property of all things and that it is the world-stuff that does the thinking.

**Doctrine of Reincarnation.** Empedocles also proclaims his belief in reincarnation. Men, he tells us, are fallen daemons who have sinned, and for punishment must "wander thrice ten thousand seasons from the abodes of the blessed, being born throughout the time in all manner of mortal forms, changing one toilsome path of life for another." He himself is "one of these, an exile and a wanderer from the gods. . . . For I have been ere now a boy and a girl, a beast and a bird and

<sup>1</sup> Frs. 133, 134 (Burnet, p. 225).

<sup>2</sup> Fr. 21 (Burnet, p. 209).

a dumb fish in the sea. . . . From what honour, from what height of bliss have I fallen to go about among mortals here on earth.”<sup>3</sup> This view is inconsistent with what he has to say later on about death.

**Fire, Air, Water and Earth Fill the Universe.** In his philosophy proper, Empedocles quarters the Parmenidean sphere of undifferentiated Being into four elements: the Fire, Water, and Earth of his predecessors, to which he adds Air, whose corporeal nature had by his time been recognized. Each one of these elements is uncreated, indestructible, and internally simple, homogenous and incapable of change and alteration. Of these four elements or “roots,” as Empedocles calls them, all things in the universe are composed. Individual things possess no proper substance of their own. “They are only a mingling and interchange of what has been mingled. Substance is but a name given to these things by men.”<sup>4</sup>

The four “roots” he so closely compacted that there is no such thing as empty space. In denying the existence of the void, Empedocles is as emphatic as Parmenides. “In the all there is naught empty.”<sup>5</sup> At the same time, he does not find that a lack of empty space to move in makes change of place impossible—an opinion that, as we have just seen, was attacked by Melissus. Perhaps he relied on sensible experience, in which substances seem to interpenetrate one another without perceptible interstices, as when solids dissolve in liquids, and liquids seep through solids, and fire springs directly from the materials it is consuming. Perhaps, too, the discovery that the “empty air” is corporeal helped, since solids and liquids and fire could apparently move through “solid” air and “solid” air could interpenetrate them. We might remember, too, that in the seventeenth century, the philosopher Descartes, who was also an eminent mathematician and physicist of his time, upheld the possibility of locomotion within a *plenum*. However that may be, Empedocles believed that space is full, and found no difficulty in reconciling the possibility and reality of change of place with this concept.

**The Four Elements Moved by Love and Strife.** There was, however, one difficulty that apparently he did find in explaining the occurrence of motion in a universe composed of elements that measured up to the Parmenidean specifications of real being. To make the four “roots” the sources of their own movement, and to say that each was inherently, and naturally, and of its own self in motion, might seem to threaten their inner immobility and to make change of place an essen-

<sup>3</sup> Frs. 115, 117, 119 (Burnet, p. 223).    <sup>5</sup> Frs. 13, 14 (Burnet, p. 207).

<sup>4</sup> Fr. 8 (Burnet, p. 206).

tial characteristic of them. In that case it would be difficult, if not impossible, to think of them as in themselves the static entities that Eleatic logic demanded they should be. In any case, whether or not Empedocles felt this difficulty, we find him conceiving them as in themselves inert, and attributing their change of place and their consequent commingling to two further factors, which he calls Love and Strife, or we might say, attraction and repulsion.<sup>6</sup>

Just how he conceived these two factors we do not know. There is good ground for believing that he did not regard them as incorporeal "forces," as such a concept would have been out of keeping with his time and background. Rather, we are told, they were considered by him to be corporeal.<sup>7</sup> Certainly he himself describes them as equal in weight, length and breadth to the four "roots." He also calls Love, Aphrodite, and regards sexual desire as a manifestation of it. For that matter, he frequently uses sexual terms and analogies to describe its cosmic workings and results.

**The Alternation of Love and Strife.** Love and Strife alternate in moving the four "roots." The world-process, then, moves in recurrent cycles of four periods. There is a stage in which the influence of Love is complete, and Fire, Air, Water and Earth are completely commingled. Then Strife begins to prevail, and there is a gradual separation of the roots from one another until, when Strife is completely triumphant and Love has been overcome, the four elements lie wholly separated out from one another and apart. Finally, Love makes itself felt again, the elements begin to interpenetrate one another, and the commingling continues till their fusion is once more complete.

Obviously no universe such as we inhabit can exist at the poles of this process, when the Fire, Air, Water and Earth are wholly fused or wholly isolated. The formation and destruction of a world can recur only in the intermediate periods of the cycle, when Love and Strife are contending with each other and the "roots" are only partially commingled or separated. "There is a double becoming of perishable things, and a double passing away. The coming together of all things brings one generation into being and destroys it; the other grows up and is scattered as things become divided. And these things never cease continually changing places, at one time all uniting in one through Love, at another borne in different directions by the repulsion of Strife."<sup>8</sup>

<sup>6</sup> Cf. Cherniss, *op. cit.*, p. 399.

<sup>7</sup> Cf. Zeller, *Pre-Socratic Philosophy*, II, p. 138; Burnet, *op. cit.*, p. 232.

<sup>8</sup> Fr. 17 (Burnet, p. 207). Cf. Fr. 26, Burnet, p. 210.



**Cosmology.** There is some question as to whether Empedocles believed our world to belong to the period in which Love is casting out Strife, or to that in which Strife is casting out Love.<sup>9</sup> The fragments we possess are not decisive, nor do they give a clear picture of his cosmology. By later commentators we are told that Air was first separated out, then Fire, and then Earth. Fire rushed up and solidified a portion of the Air into a sort of crystalline eggshell surrounding the universe—an idea possibly connected with the Orphic world-egg from which the god, Phanes, was hatched. Immediately within this shell of crystallized Air a hemisphere of Fire formed, and the displaced Air, mixed with Fire, sank down below the earth and became a dark hemisphere in which the Fire appears as the fixed stars attached to the Air, and as free-moving planets.

The upward rush of Fire and the downward rush of the displaced Air set the cosmic egg rotating about the earth and presenting now the sphere of star-studded Air, now the sphere of pure Fire. The sun, Empedocles thought, was a spot of light reflected back upon the heavens by the earth from the radiance of the fiery hemisphere. The moon was a disc of frozen air, shining with light reflected from the sun. The darkness of night was caused by the disappearance of the fiery sphere beneath the earth, and the consequent obscuration of the earth's upper surface by its own shadow. Solar eclipses were caused by the moon cutting off the sun's rays "as he goes above her" and casting "a shadow on as much of the earth as is the breadth of the pale-faced moon."<sup>10</sup> These last assertions were founded on contemporary astronomical discoveries of the true nature of the moon's light, of the darkness of night, and of solar eclipses.

The separated Earth and Water were precipitated to the center of the universe, where the Water was squeezed out of the Earth by pressure. "Sea" is "the sweat of earth." Wind is caused by the movement of the two hemispheres; rain by the compression of Air squeezing out the Water mixed with it; lightning by the squeezing of the Fire out of the clouds. The Earth shares in the general rotation of the universe, whose rapid spinning keeps it and the heavens in their proper places and prevents them from falling. Empedocles is said to have illustrated this by the whirling of a cup of water at the end of a string.

**The Origin and Development of Life.** Of the origin and development of life on earth, Empedocles gives an interesting account. A

<sup>9</sup> Zeller advocates Love, Burnet, Strife. Cf. Burnet, pp. 234 ff.

<sup>10</sup> Fr. 42 (Burnet, p. 213).

certain mixture of the four elements agitated by both Love and Strife forms the primitive organic compound from which all living beings arise. First come plants, to which Empedocles attributed bi-sexuality as well as sensation, pleasure, pain, and desire. They are followed by the evolution of animals and man.

In the period in which Strife is casting out Love, this evolution proceeds as follows. "Whole natured forms first arose from the earth, having a portion both of water and fire. These did the fire, desirous of reaching its like, send up, showing as yet neither the charming form of the limbs, nor yet the voice and parts that are proper to men."<sup>11</sup> The sex and species of these primitive forms were unrecognizable, but the continued operation of Strife separated them into species and into males and females. Such species as were "better suited to it took to the water; others were wafted up into the air for such time as they possessed more of the fiery matter, and the heavier remained on earth."<sup>12</sup> Meantime there was sufficient Love in the mixture to keep living bodies and species fairly fixed in structure and to insure perpetuation of the species by reproduction.

When a universe is formed by the reverse process of Love casting out Strife, life begins with the production of disjointed and scattered animal parts. "Many heads sprung up without necks, and arms wandered bare and bereft of shoulders. Eyes strayed up and down in want of foreheads. Solitary limbs wandered seeking union. But as divinity was mingled still further with divinity [i.e., Love with Strife] these things joined together as each might chance, and many other things arose. Shambling creatures with faces and breasts looking in different directions were born; some offspring of oxen with faces of men, while others again, arose as offspring of men with the heads of oxen, and creatures in whom the nature of women and men was mingled, furnished with sterile parts."<sup>13</sup>

In this as in the other process of evolution, Empedocles taught, according to Aristotle, that those forms survived which were suited to their environment, while the unfit were weeded out. "Certain things have been preserved because they had spontaneously acquired a fitting structure, while those which were not so put together have perished and are perishing, as Empedocles says of the oxen with human faces."<sup>14</sup>

**Evolution and Physiology.** Empedocles supplemented his theories of evolution by noting the analogies in the structure of different living species. He thought, for example, that "hair and leaves and thick

<sup>11</sup> Fr. 62 (Burnet, p. 215).

<sup>12</sup> Aetius, V, 19.

<sup>13</sup> Frs. 57-61 (Burnet, p. 214).

<sup>14</sup> *Phys.* II, 8, 198 b (Burnet, p. 243).

feathers of birds and scales that grow on mighty limbs are the same thing." He studied the nature of reproduction and of nutrition, and has left a long passage on respiration in which he remotely foresaw the circulation of the blood. The blood, he says, pulses to and fro between the surface and the interior of the body, pulling in the air after it through the pores of the body as well as the nose and mouth, when it recedes from the surface, and driving them out again when it returns. He also studied the structure of the eye and the nature of vision.

**Consciousness and Perception.** To his biological and physiological studies Empedocles added investigations in what we today should call the field of psychology. He does not seem, any more than his predecessors, to have made conscious and mental activity a separate principle. "All things," he tells us, "have wisdom and a share of thought,"<sup>15</sup> and in ourselves it is the basic "roots" mixed in our bodies which "think, and feel pleasure and pain."<sup>16</sup> Our consciousness, furthermore, is more or less localized in the heart and the surrounding blood, "for the blood round the heart is the thought of men."<sup>17</sup> He chose the blood, we are told, because "in it of all parts of the body, all the elements are most completely mingled."<sup>18</sup> Incidentally, the different capacities, temperaments, and humors displayed by different individuals are the expressions of varying conditions and proportions of the mixture.<sup>19</sup> Sleep is due to a partial separation of Fire from the other elements, which gives rise to "a moderate cooling of the blood." If the Fire becomes wholly separated, and the blood becomes completely cold, we die.<sup>20</sup> Then the organic mixture is dissolved and the constituent elements combine in new ways, or merge, each with its kindred "root." Such views are quite inconsistent with his Orphic doctrine of reincarnation.

Empedocles also discussed perception at some length, which he found to be bound up with the affinity of the particles of the four elements, each for its own kind, and with their tendency, expressed in Strife, to seek out their fellows. Hence the elements commingled in our bodies are sensitive to the corresponding "roots" mixed in external bodies. These bodies are continually giving off effluences,

<sup>15</sup> Fr. 110 (Burnet, p. 221).

<sup>16</sup> Fr. 107 (Burnet, p. 220).

<sup>17</sup> Fr. 105 (Burnet, p. 220).

<sup>18</sup> Theophrastus, *De Sensu*, 10 (Burnet, p. 247).

<sup>19</sup> *Ibid.* (Aetius, V, 24, 25).

<sup>20</sup> Cf. Burnet, pp. 244-245.

which strike the body, enter the sense-organ best fitted to receive them, and are amalgamated with the kindred element within.

**The Operation of the Senses.** Thus, in seeing, light is perceived by the Fire within the eye, darkness by the Water, and differences of ability to see by day or by night are explained by the preponderance of one of these elements in the organ of vision. "Hearing," he holds, "is produced by sound outside, when the air moved by the voice sounds inside the ear; for the sense of hearing is a sort of bell sounding inside the ear. . . . When the air is set in motion it strikes upon the solid part, and produces a sound." Smell, he holds, arises from respiration. As to touch and taste, he does not lay down how, nor by what means they arise, except that he gives us an explanation applicable to all: that sensation is produced by adaptation to the pores. Pleasure is produced by what is like in its elements and their mixture; pain, by what is opposite.

"And he gives a precisely similar account of thought and ignorance. Thought arises from what is like, and ignorance from what is unlike, thus implying that thought is the same, or nearly the same, as perception. . . ." <sup>21</sup>

### III. ANAXAGORAS

**Life.** Anaxagoras, the next philosopher on our list, was born about 500 B.C. at Clazomenae near present-day Smyrna. But he spent the larger part of his life at Athens as an intimate of the statesman Pericles, the builder of the Athenian Empire. And he was an adornment to the brilliant circle of artists, sculptors, architects, musicians, and poets that Pericles gathered about himself to his own and Athens' great glory. Among them were the sculptor Phidias, who carved the frieze of the Parthenon; Ictinus and Callicrates, the supervising architects of the building; and Mnesicles who planned the Propylaea leading up the slope of the Acropolis; the historians Herodotus and Thucydides; Damon, one of the most intelligent and cultivated men in Athens, and the great musician of the day; and the poets Sophocles and Euripides. So Anaxagoras moved in good company. But he himself was no mean contributor to the splendor of the Periclean Age.

Towards the end of his life, however, he got into trouble. The Athenians were conservative in matters religious, and in this respect differed from the liberal, free-thinking, tolerant Ionian Greeks. Pericles himself was accused by the opposition party of being pro-

<sup>21</sup> Theophrastus, *De Sensu*, 7 ff. (Burnet, pp. 246-247).

Ionian and un-Athenian in his views, and his court, and especially his Milesian mistress, the brilliant and emancipated Aspasia, were in disfavor with the fundamentalists of the day. The opposition lost no opportunity to wound him through his friends, and the publication of Anaxagoras' philosophical system gave them an excellent opening. In his book Anaxagoras had declared that the sun was not a god, but a piece of fiery stone about the size of the Peloponnesus. The moon, too, was not a goddess but was made "of earth and had plains and ravines in it." For these assertions he was tried for blasphemy, convicted, and thrown into prison. He escaped, however, perhaps with Pericles' aid, and fled back to Ionia. He settled at Lampsacus, where he died, mourned by his adopted countrymen, who erected an altar dedicated to mind and truth in his memory.

**Pluralistic Treatment of Eleatic Being.** Anaxagoras seems to have received his first lessons in philosophy from disciples of Anaximenes. He was, however, impressed, like Empedocles, with the Parmenidean logic, and accepted the Eleatic dictum that what is real can be neither created nor destroyed nor internally altered, and that it must be a *plenum*, packed solid and with no emptiness within it. But, like Empedocles, he felt that the absence of empty space, and the completely continuous character of the Real, did not exclude the possibility of multiplicity and variety and change of place within it. He, too, dealt with the Parmenidean sphere by smashing it to bits to which he attributed different but unalterable characteristics, and he explained the diversity and alteration of the sensible world in terms of the spatial combination, separation, and rearrangement of these particles. Furthermore, he explicitly proclaimed that the world-stuff is infinitely divisible. "Nor is there a least of what is small, but there is always a smaller; for it cannot be that what is should cease to be by being cut. Hence it is impossible that there should be a least thing."<sup>22</sup> With Melissus' criticism of this dictum we are already familiar.

**Advance over Empedocles.** Anaxagoras, however, was unwilling to stop with the division of Parmenidean Being into four stuffs. It has been suggested that he felt that the rearrangements of Fire, Air, Earth and Water in the variety of sensible substances really involved the occurrence in the Real of new *qualities*—just, we might say, as a mixture of red and yellow would be no longer just red *plus* yellow, but a new color, orange. But Parmenides had shown to Anaxagoras'

<sup>22</sup> Frs. 3, 6 (Burnet, pp. 258, 259).

satisfaction, and, for that matter, to Empedocles', that the appearance of new qualities was impossible. What is real is what it always was. In that case variety and apparent alteration could, in Anaxagoras' opinion, be reconciled with the immutable character of Reality only by supposing that as many different elements really exist as there are sensible examples of qualitative difference.<sup>23</sup> There must be ultimate particles of hair and flesh, for example, just as there are ultimate particles of fire, air, water, and earth. For "how can hair come from what is not hair, or flesh from what is not flesh?"<sup>24</sup>

**The "Seeds" and Their Mixed Nature.** So it is that we find Anaxagoras pulverizing the Parmenidean sphere of being into an indefinite number of kinds of qualitatively different "seeds," as he called them, each one of which is quantitatively infinitely divisible. Reality, according to him, is a mixture of these seeds, and sensible variety and alteration are the result of their coming together in different combinations which are eventually dissolved.

However, and this is one of the most distinctive marks of his system, the "seeds" themselves, instead of being homogeneous after their kind, like Empedocles' particles of Fire, Air, Water and Earth, are themselves mixtures, and remain such, no matter how minutely they are divided. Each kind of "seed" contains a portion of every other kind, or at least of all opposed qualities.<sup>25</sup> "The things that are in the world are not divided nor cut off one from another with a hatchet, neither the warm from the cold, nor the cold from the warm." So, too, there is a mixture "of the moist and the dry . . . and the light and the dark and of a multitude of innumerable seeds in no way like each other. For none of the other things either is like any other." All things, then, "will be in everything; nor is it possible for them to be apart, but all things have a portion of everything."<sup>26</sup>

Everything, however, is not equally present in all the seeds. In some, one quality predominates, in others, another. Hence we have various sorts of seeds, whose different kinds are determined by the nature preponderant in them, as, for example, hot, cold, moist, dry, light, dark, hair, flesh. But mixed with cold in the seeds of cold there is some hot, and it may be some hair and flesh, while a seed of flesh contains some hair and some light, etc., though in such small proportions that they do not adulterate its essentially fleshly character.

In this way, perhaps, by attributing mixture to the qualitatively different seeds themselves, Anaxagoras may have felt that he was

<sup>23</sup> Cf. Cherniss, *op. cit.*, pp. 400-401.

<sup>25</sup> Cf. Burnet, pp. 263 ff.

<sup>24</sup> Fr. 10 (Burnet, p. 259).

<sup>26</sup> Frs. 4, 6, 8 (Burnet, pp. 258-259).

avoiding what he apparently considered the weakness of the Empedoclean philosophy—the danger that mixtures of unmixed Fire, Air, Water and Earth might produce new qualities in the nature of the Existent and thus destroy the unalterable character of the Real. If every kind of seed always possessed to some degree the distinctive characteristics of all the other kinds, no matter how far the process of quantitative division was pushed, then plainly no new qualities not already contained in the seeds could be produced by, or in, any mixture of them. On the contrary, each seed of the truly Existent would already possess, immutably and to and from eternity, all the qualities that ever could appear in the universe as the result of any mixture whatsoever.

**The "Seeds" Imperceptible to the Senses.** Again, whereas Empedocles, like Heraclitus and the Milesians, found the world-stuff in elements apparent to the senses, the seeds of which Anaxagoras constructs his world stuff, though possessed of qualities perceptible *en masse*, are not individually perceptible like Fire or Air or Water or Earth. We do not, then, immediately experience the true nature of the Real. "From the weakness of our senses we are not able to judge the truth. What appears is a vision of the unseen."<sup>27</sup> In short, Anaxagoras, like Parmenides, invokes reason to indicate what Reality is like, and demonstrates by argument the character of the world-stuff. He supports, however, his trust in the power of reason to figure out what escapes the senses by his account of the nature of mind, to which we shall come in a moment.

**Melissus' Criticism of Anaxagoras.** These views, however, did not save Anaxagoras from censure by the Eleatics. Melissus seems to have argued that the doctrine that "all things have a portion of everything" made the seeds themselves composite and variegated, and thus open to the objections Parmenides had made to the reality of multiplicity and variety. And the qualitative differences, like those of the sensible world, were only seeming. What really *was* in each one of them was its "being," and hence, since the "being" of one was in no wise different from the "being" of the other, they were in reality identical, and their multiplicity became as much a matter of false opinion as their variety.

Furthermore, in affirming that *what is* is not perceived by the senses but discovered by reason, Anaxagoras had admitted the unreality of sensible characteristics, and by the same token the worthlessness of our sensible experience of multiplicity, variety, and motion as evi-

<sup>27</sup> Frs. 21, 21 a (Burnet, p. 261).

dence of the nature of the Real, and had thus given his case away.<sup>28</sup> We turn back now to Anaxagoras' views about mind.

**The "Unmixed" Nature of Mind.** Mind is the one exception to the rule that "all things have a portion of everything." All other things, he tells us, "partake in a portion of everything, while *Nous* [mind] is infinite and self-ruled and is mixed with nothing, but is alone, itself by itself. . . . It is the thinnest of all things and the purest." It permeates the cosmic mixture. It "is certainly there where everything else is, in the surrounding mass, and in what has been united with it, and separated off from it." Furthermore, "it has knowledge about things. . . . And all the things that are mingled together and separated off and distinguished are all known by *Nous*."<sup>29</sup> We might, then, perhaps say that Mind, by virtue of being diffused throughout the "unseen" mixture and in contact with it, can know what the senses cannot perceive.

**Mind the Only "Self-moving Seed."** Again, Mind seems to be the one element among the seeds that possesses an inherent activity and motion of its own, in contrast to the other ingredients of the mixture which are in themselves static and inert. Mind has "the greatest strength; and *Nous* has power over all things, both greater and smaller, that have life."<sup>30</sup> To the exertion of this power is due the evolution of the cosmic mixture into a universe.

The evolution of the world begins as follows. Mind sets up a whirling motion, or vortex in the mixture. "And *Nous* had power over the whole revolution, so that it began to revolve in the beginning. And it began to revolve first from a small beginning; but the revolution now extends over a larger space, and will extend over a larger still. And *Nous* set in order all things that were to be, and all things that were and are not now, and are, and this revolution in which now revolve the stars, and the sun and the moon and the air and the aether that are separated off."<sup>31</sup>

Just how Anaxagoras thought of Mind and how he conceived the method by which it sets the mixture revolving and orders things is uncertain. Some modern commentators have felt that he regarded it as incorporeal, or at least that he was on his way towards conceiving it as an immaterial principle. Indeed, some suggest a personalistic, theistic interpretation. Others, however, argue that his description of it as thin, and unmixed, and diffused throughout the mixture, and

<sup>28</sup> Cf. Cherniss, *op. cit.*, pp. 402 ff.

<sup>29</sup> Frs. 12, 14 (Burnet, p. 260).

<sup>30</sup> Fr. 12 (Burnet, p. 260).

<sup>31</sup> *Ibid.*



"alike, both the greater and the smaller," in contrast to the mixed character of the other seeds, will not permit of such an interpretation. From this point of view, there are corporeal mind-seeds, just as there are material seeds of everything else.

**The Activity of Mind Probably Not Conceived as Teleological.** Again, some commentators envisage Mind as exercising its power over the seeds in a purposive and teleological manner, and ordering the course of events in accordance with a plan. Others think, on the contrary, that Anaxagoras was simply perpetuating the Ionian, hylozoist tradition in which he was educated, according to which the world-stuff "thinks all over," and by which no distinction between teleological and other kinds of activity and movement had been drawn. According to this point of view he probably thought of the mind-seeds as communicating their inherent movement to the inert constituents of the mixture in the same way that physical bodies in motion impart their movement to others with which they come in contact. If Anaxagoras really had broken so completely with the Ionian tradition and had thought up such innovations as the immaterial nature of Mind and its purposive planning of the world-process, we might expect him to have proclaimed explicitly and to have emphasized these new ideas. But, as we have seen, we find no such unequivocal declarations in the fragments we possess. And the ancient historians of philosophy make no mention of his ever having made them.

**Platonic and Aristotelian Criticisms of Mind.** Indeed, Plato, either using Socrates as a mouthpiece, or, it may be, reporting Socrates' own views, expresses disappointment at finding that Anaxagoras, for all that he said Mind caused and ordered all things, "ascribed no causal power whatever to it in the ordering of things, but to airs, aethers, and waters, and to a host of other strange things."<sup>32</sup> And Aristotle, while praising him for saying that "reason was present—as in animals so throughout nature—as the cause of the world and of all its order,"<sup>33</sup> complained that he used it "as a *deus ex machina* to account for the formation of the world," invoking it only when he was at a loss for "some other explanation, and generally speaking, ascribing events to anything rather than to mind."<sup>34</sup>

**The Anaxagorean Cosmology.** But, by whatever means Mind set the mixture whirling, and whether or no it continued to guide teleologically the vortex thus produced, the first effect of the revolution of the mixture was a separation of opposites. "And this revolution

<sup>32</sup> *Phaedo*, 97 B, 8 (Burnet, p. 267).      <sup>34</sup> *Ibid.*, 4, 985 B, 18 ff.

<sup>33</sup> *Met.* I, 3, 984 B, 15 ff.

caused the separating off, and the rare is separated from the dense, the warm from the cold, the light from the dark, and the dry from the moist." But, Anaxagoras hastens to remind us, "nothing is altogether separated off, nor distinguished from anything else, except Nous."<sup>35</sup>

Next, "the dense and the moist and the cold and the dark came together where earth is now, while the rare and the warm and the dry [and the bright] went out towards the further part of the aether." From "these" (i.e., the dense, moist, etc.) "as they separated off earth is solidified, for from mists water is separated off, and from water earth. From the earth stones are solidified by the cold, and these rush outwards more than water."<sup>36</sup> The stones may be the great rocks, which, according to the description of Anaxagoras' cosmology by ancient commentators, were hurled off by the rotation of the earth and, becoming incandescent by their rapid motion, went on revolving about the earth in the spinning ether, and constituted the heavenly bodies. We may at this point remember that Anaxagoras was tried by the Athenians for impiety on the ground that he held that the sun and the moon were not deities but huge masses of stone. The sun, we are told, he regarded as larger than the Peloponnesus. The moon is sometimes spoken of as incandescent, sometimes as shining with a reflected light and as possessed of plains and ravines. Eclipses he explained as due to the interposition of the earth between the sun and the moon, and of the moon between the sun and the earth.<sup>37</sup> The Milky Way was the reflection of the light of the stars that were not illuminated by the sun.

The earth itself "is flat in shape and remains suspended because of its size and because there is no vacuum. For this reason the air is very strong, and supports the earth which is borne up by it." The "sea arose from the waters in the earth . . . and from the rivers that flow into it. Rivers take their being both from rains, and from the waters of the earth; for the earth is hollow and has waters in its cavities. . . . Winds arose when the air was rarefied by the sun. . . . Thunder and lightning were produced by heat striking on the clouds. Earthquakes were caused by the air above striking on that beneath the earth; for the movement of the latter caused the earth which floats on it to rock."<sup>38</sup>

<sup>35</sup> Fr. 12 (Burnet, p. 260).

<sup>36</sup> Frs. 15, 16 (Burnet, p. 260).

<sup>37</sup> Hippolytus, Ref. 1, 8, 3 (Burnet, p. 271).

<sup>38</sup> *Ibid.* (Burnet, pp. 270, 271).

**Plurality of Worlds.** Apparently Anaxagoras believed that a plurality of worlds like ours arises from the revolution of the mixture and the separation of the seeds. And we must suppose, he says, "that men have been formed in them, and other animals that have life, and that these men have inhabited cities and cultivated fields as with us; and that their earth brings forth for them many things of all kinds of which they gather the best together into their dwellings, and use them. This much have I said with regard to separating off to show that it will not be only with us that things are separated off, but elsewhere, too." <sup>39</sup>

**Development of Life.** As regards the development of the living beings arising with the mixture, we are told by later commentators that Anaxagoras held that the seeds from which vegetables and animals arose were precipitated from the air by rain and thus brought to earth, and that animals were generated in the beginning in the moist element. He is also said to have attributed pain and pleasure to plants and to have called them "animals fixed in the earth." <sup>40</sup>

**Theory of Sensation.** In his theory of the nature of sensation he differs radically from Empedocles. Instead of like perceiving like, "perception is produced by opposites, for like things cannot be effected by like." Thus in seeing, he tells us, the colors in the pupil of the eye are picked up by the colors within the eye different from them, "because the prevailing color casts an image more readily upon its opposite." Most animals see better by day than by night because the difference of the colors in the pupil from those in the external world is then more marked.

Night is more of the same color with the eyes than day. . . .

It is in the same way that touch and taste discern their objects. . . . We know cold by warm, fresh by salt, and sweet by sour in virtue of our deficiency in each. . . . And we smell and hear in the same manner; the former by means of the accompanying respiration, the latter by the sound penetrating to the brain. . . .

And all sensation implies pain, a view which would seem to be the consequence of the first assumption, for all unlike things produce pain by their contact. And this pain is made perceptible by the long continuance or by the excess of a sensation. Brilliant colors and excessive noises produce pain, and we cannot dwell long on the same things. And generally sensation is proportionate to the size of the organs of sense. <sup>41</sup>

<sup>39</sup> Fr. 4 (Burnet, p. 258).

<sup>40</sup> Cf. Burnet, p. 272.

<sup>41</sup> Theophrastus, *De sensu*, 27 ff. (Burnet, pp. 273-274).

## IV. ARCHELAUS OF ATHENS

Anaxagoras had gathered a number of disciples about him in Lampsacus, and at his death, one of them, Archelaus of Athens, succeeded him as head of the school he had founded. It is also said that Socrates studied with him.

Archelaus differed in some respects from his master. "He spoke of the mixture of matter in a similar way to Anaxagoras and of the first principles likewise. He held, however, that there was a certain mixture immanent even in *Nous* (Mind). And he held that there were two efficient causes which were separated off from one another, namely, the warm and the cold. The former was in motion, the latter at rest."

**Cosmology.** The universe arose by the flowing of water to the center of the vortex, where "being burnt up it turned to earth and air, the latter of which was borne up, while the former took its position below. . . . The earth is at rest," and "lies in the centre, being no appreciable part of the universe." From the original combustion of air

comes the substance of the heavenly bodies. Of these the sun is the largest, and the moon second; the rest are of various sizes. He says that the heavens were inclined, and that then the sun made light upon the earth, made the air transparent, and the earth dry; for it was originally a pond, being high at the circumference and hollow in the centre. He adduces as proof of this hollowness that the sun does not rise and set at the same time for all peoples, as it ought to do if the earth were level.

As to animals, he says that when the earth was first being warmed in the lower part where the warm and the cold were mingled together, many living creatures appeared, and especially men, all having the same manner of life, and deriving their sustenance from the slime; they did not live long, and later on generation from one another began. And men were distinguished from the rest, and set up leaders, and laws, and arts, and cities and so forth. And he says that *Nous* [Mind] is implanted in all animals alike; for each of the animals, as well as man, makes use of *Nous* [Mind], but some quicker, some slower.<sup>42</sup>

## V. LEUCIPPUS AND DEMOCRITUS

**Life of Leucippus.** The last steps of the attempt to reconcile the reality of multiplicity, variety, and change with the exigencies of Eleatic logic were taken by Leucippus and Democritus.

<sup>42</sup> Hippolytus, Ref. 1, 9 (Burnet, pp. 359-360).

Of Leucippus' life we know little. He was born, according to a varying tradition, at Abdera, at Elea, at Melos, and at Miletus. The date of his birth is unknown, but apparently he was a contemporary of Empedocles and Anaxagoras. He is reputed to have been a disciple of Parmenides and even of Zeno. Whether or not he committed his views to writing is not known, and we have only one direct quotation of his teaching. Our knowledge of him is wholly derived from the comments of ancient writers, by whom he is always mentioned in conjunction with his pupil Democritus.

**Life of Democritus.** Of Democritus we know somewhat more. He was born about 460 B.C. at Abdera in Thrace, where he spent a considerable portion of his life teaching and building up a group of disciples. He was rich and independent, and apparently traveled extensively. He wrote voluminously—and was rated as second only to Aristotle in his literary fecundity by the historian Diogenes Laertius, who gives a long catalogue of his works on physics, astronomy, biology, psychology, mathematics, and grammar, as well as treatises on agriculture, painting, tactics, law, coughing, fever, and the like. In Graeco-Roman times he enjoyed a reputation almost as great as those of Plato and Aristotle, not only because of his learning and his philosophic genius, but because of a literary style, comparable, in ancient opinion, with that of the Platonic dialogues.

**Identity of Their Views.** Unfortunately, his works have all been lost, "the most lamentable [loss] that has happened to the original documents of ancient philosophy,"<sup>43</sup> and many of such purported fragments as have come down to us are of doubtful authenticity. For his views, as for those of Leucippus, we are obliged to rely largely upon later commentators. They seem, however, to have so nearly coincided with those of Leucippus that we may count the philosophies of master and pupil as a single system. This system, as we are about to see, not only clarified, crystallized, and brought to a head and a conclusion the work of their predecessors, but also, in so doing, it laid down the fundamental principles of the atomic and mechanistic hypothesis which has been the basis of all scientific advance up to the present day.

**Attempt to Reconcile Pluralism with Eleatic Logic.** Leucippus, like Empedocles and Anaxagoras, accepted the Eleatic teaching that whatever really *is* must be uncreated and indestructible, and internally homogeneous, immutable, *in*variable, and unalterable. Like them, too,

<sup>43</sup> Windelband, *History of Ancient Philosophy* (Eng. trans., 1889), p. 172.

he conceived the Real as a multiplicity of constituent elements each one of which possessed these characteristics. And like them he maintained that these constituents could change their place and reduced the qualitative varieties and alterations, as well as the spatial movement perceived by the senses, to terms of such change. Like Anaxagoras, moreover, he pulverized the Parmenidean sphere into a powder whose particles were too minute to be perceived as they are in themselves. And like Anaxagoras, heedful, too, it may be, of the criticisms of Melissus, he admitted the infinite divisibility, mathematically, at least, of these particles.

1. The "Atoms" Stripped of Secondary Sensible Qualities. But Leucippus also made four important novel modifications of the pluralistic hypothesis. In the first place, influenced it may be by the arguments of Melissus, he distilled the constituent elements of his Reality clear of what we should today call their secondary qualities—color, taste, smell, temperature, tactile characteristics, etc., and left them possessed of magnitude alone. "And he made their forms infinite in number since there was no reason why they should be of one kind rather than another." Democritus tells us that they differed in size as well as shape—whether repeating Leucippus' teaching or adding to it we do not know. These particles, moreover, are absolutely solid, and internally homogeneous. Each one is a *plenum*, with no emptiness within it—intrinsically an Eleatic "one" in all respects. In substance the particles are absolutely alike—made of the same identical stuff, so to speak. Since they possess spatial magnitude, they are divisible in mathematical theory, but, being completely solid, compact, and internally continuous, they are, as a matter of physical fact, indivisible. To split them there would have to be interstices between their parts for a knife to enter. But they have no parts between which such interstices can exist. They are incapable of being cut—in Greek *a* (not) and *tomé* (cut, separation). Hence Democritus called them *atoma* or, as we say, *atoms*.

All qualitative differences are expressive of the different shapes, and, with Democritus, sizes, of the atoms, and of the different spatial positions and arrangements they assume. All change of quality is *really* nothing but change of place as the atoms shift their positions and pass from one spatial arrangement to another. This is explicitly asserted by Democritus, and there is reason to believe he got it from Leucippus. In short, all qualitative difference was reduced to and explained in terms of quantitative difference, and all qualitative change was reduced

to and explained in terms of movement in space. This is one of the cardinal principles of science today.

**2. Assertion of the Evidence of Empty Space.** In the second place, Leucippus parted company with both Empedocles and Anaxagoras over the question of the possibility of motion in a *plenum*. They, it will be remembered, had followed Parmenides in his denial that empty space—or the void—can exist, and had packed their “roots” and “seeds” into an absolutely continuous mass. But they had held, nevertheless, that in spite of there being no free space to move in, the particles into which they had pulverized the Parmenidean sphere could change their place. This view, as we have seen, was attacked by Melissus. Leucippus agreed with Melissus’ criticism, it would seem, but he refused to abandon with the Eleatics the reality of motion. On the contrary, he rejected the Eleatic conclusion on this point, took the bull by the horns and proclaimed that empty space—or the void—exists and that the atoms move in it. This was a revolutionary assertion for his day, since it was tantamount, in the language and thought of the times, to maintaining the existence of that in which nothing exists.

**3. Motion Universally Inherent in All the Atoms.** In the third place, Leucippus refused to segregate the sources of motion in special principles, like Empedocles’ Love and Strife and the mind-seeds of Anaxagoras, and declined to attribute the origin of the movement of the other constituents of the Real to their activity. *All* the atoms, he declared, are and have always been naturally and inherently in motion. Their motion, like themselves, is uncreated and indestructible, and it is no more necessary to seek an explanation for its existence than it is for their existence. There is, then, no need of any external agent to set them in motion in the beginning or to keep them moving. They just move, even as they are just there, and that is all there is to it. To ask why Being is in motion is like asking why Being *is*.

**4. Motion and Causation Mechanistic in Character.** Finally Leucippus thinks that the atoms change their places and arrangements in a purely “mechanical” manner. Their movements and situations at any given moment are the necessary outcome of antecedent situations and movements, and it is in those antecedent conditions only that we should seek and that we can find the explanations of their patterns and motions at that moment. In the one direct quotation of his opinions that has come down to us—a quotation, it should be said, that has also been attributed to Democritus—it is affirmed that “naught happens for nothing, but everything from a ground and of necessity.”<sup>44</sup>

<sup>44</sup> Aetius, I, 25, 4 (Burnet, p. 340).

This would seem to rule out not only chance, but purpose and design as well from the movement of the atoms.<sup>45</sup>

Here, again, we have two basic principles of modern science. Physics deals with a universe already in motion and does not seek to go behind that fact. For it, as for Leucippus and Democritus, movement, activity, occurrence, are simply there and require no explanation. Again science proceeds on the assumption that at any rate gross physical events do not happen at random,<sup>46</sup> and it has ruled out design and purpose as scientific explanations of their occurrence. It, too, regards events as necessary effects of antecedent situations, and seeks their causes there.

**Concept of the Atom.** There has been considerable discussion among modern commentators as to whether Leucippus and Democritus thought of the atoms as inherently possessed of weight, and whether they regarded the native motion of the atoms as a perpendicular fall through space or as a flying-about in all directions. Epicurus, who, as we shall presently see, made the views of Democritus the basis of his system, attributed weight and an inherent falling motion to them. But even ancient evidence is contradictory as to the origination of these concepts by Democritus himself, and there is ground for believing that they were modifications introduced by Epicurus. The consensus of modern opinion would seem to be that the motion of the atoms as conceived by Leucippus at any rate, and probably by Democritus, was simply a hurtling about hither and thither. It has also been pointed out that the phenomenon of weight did not particularly interest earlier Greek philosophers, and was generally ascribed by them to a tendency of the particles of the different elements to attract their like and to come together, rather than associated with the idea of a perpendicular fall.<sup>47</sup>

**The Real in Relation to the Atom.** We may now sum up Leucippus' view of the nature of the Real and describe how he conceived the generation of the worlds, and particularly of our world, within it, in the words of the ancient historian Diogenes Laertius, based upon an earlier account of the commentator Theophrastus.

He says that the All is infinite, and that it is in part void, in part full. These [the full and the empty], he says, are the elements. From them

<sup>45</sup> Cf. Zeller, *Pre-Socratic Philosophy*, II, pp. 237 ff.

<sup>46</sup> The possible tychistic or undetermined and chance character of the "goings on" within the atom does not appear to interfere with our conducting our scientific dealings with nature on a deterministic basis.

<sup>47</sup> Cf. Burnet, pp. 341 ff.



arise innumerable worlds and are resolved into them. The worlds come into being thus. There were borne along by "abscission from the infinite" many bodies of all sorts of figures "into a mighty void," and they being gathered together, produce a single vortex. In it, as they came into collision with one another and were whirled round in all manner of ways, those which were alike were separated apart and came to their likes. But, as they were no longer able to revolve in equilibrium owing to their multitude, those of them that were fine went out to the external void, as if passed through a sieve; the rest stayed together and becoming entangled with one another, ran down together and made a first spherical structure. This was in substance like a membrane or skin containing in itself all kinds of bodies.

And, as these bodies were borne round in a vortex, in virtue of resistance of the middle, the surrounding membrane became thin, as the contiguous bodies kept flowing together from contact with the vortex. And in this way the earth came into being, those things which had been borne towards the middle abiding there. Moreover, the containing membrane was increased by the further separating out of bodies from the outside; and, being itself carried round in a vortex, it got further possession of all with which it had come in contact. Some of these becoming entangled, produce a structure, which was at first moist and muddy; but, when they had been dried and were revolving about with the vortex of the whole, they were then ignited and produced the substance of the heavenly bodies. The circle of the sun is the outermost, that of the moon is the nearest to the earth, and those of the others are between these. And all the heavenly bodies are ignited because of the swiftness of their motion; while the sun is also ignited by the stars. But the moon receives only a small portion of fire. The sun and the moon are eclipsed (and the obliquity of the zodiac is produced) by the earth being inclined towards the south; and the northern parts of it have constant snow and are cold and frozen. And the sun is eclipsed rarely, and the moon continually, because their circles are unequal. And just as there are comings into being of the world, so there are growths and decays and passings away in virtue of a certain necessity, of the nature of which he gives no clear account.<sup>48</sup>

**Astronomical Views.** In addition to this account, we have reports that Democritus—whether on the authority of Leucippus or out of his own head we do not know—supposed that at first the earth moved about within the vortex, while it was still small and of little density, but later on, as it grew bigger and more solid, settled in its place at the center. Again the Epicurean notion that the winds and the influences of the stars forced the smaller atoms to the surface of the earth where they became water, while the earth in consequence con-

<sup>48</sup> Diogenes Laertius, ix, 31 ff. (Burnet, pp. 338-339).

densed and grew solid may perhaps have originated with Democritus. The earth itself, he—and possibly Leucippus—taught was not round but a large thin disc, half again as long as it was broad, upheld by the air. Leucippus, as we have just seen, said the earth was tilted. The sun and moon were represented as big bodies, and Democritus regarded the lunar markings as shadows cast by mountains on it. There was also a question whether they belonged originally to our vortex or had been caught in from the outside by the bodies revolving within it.

**Religious Views.** We also have fragments and accounts of Democritus showing that he explored philosophic fields that we have no evidence ever were entered by Leucippus. For instance, we know a good deal about his religious views. Like most of the early philosophers he called the world-stuff divine. Particularly he applied the term to fire and to the heavenly bodies as well as to the soul-atoms which, he thought, were responsible for animation and consciousness in living bodies. The individual, personal gods of Greek theology he explained as personifications of natural phenomena and moral qualities. But he treated them with reverence. Also he felt that there were sound philosophic reasons for believing in the existence of divine, man-like beings in our world. Only on such a supposition could we explain, in his opinion, the dreams and apparitions, foreboding both good and ill, in which godlike figures appeared to mankind. But these beings, though more powerful and longer-lived than ourselves, were made of the same atomic stuff as we are, and like us eventually perished.

**Biology.** Democritus denied personal immortality—which brings us to his biology, physiology and psychology and his ideas regarding the nature of the soul. His biology and physiology seem to have been chiefly concerned with man, whom he described as a little world. He tells us that life originated in mud or slime, and we have scattered fragments about plants and animals. He was much struck by the adaptation of animal and particularly of human organs to their uses, and ascribed it to the workings of some hidden principle.

**The Soul and Its Relation to the Body.** The soul is atomic in character. Its particles are like if not identical with those of fire, and are very fine, round, smooth, polished, and mobile, and are diffused throughout the void. When they cluster together in a mass of other atoms, that mass becomes living and conscious. Consciousness, indeed, is nothing but their quivering and dancing. They are spread throughout the entire body, and are continually inhaled and exhaled by it. As long as the quantity of them in the body remains approximately

constant, life and consciousness continue. A slight deficiency in their number produces sleep, a more serious one causes fainting or coma, and at times apparent death, and a complete loss of them means real death to the body which their presence has animated. Once out of the body they disperse and are lost in the crowd of soul-atoms with which the universe as a whole is suffused, and the body they have deserted disintegrates into its constituent atoms. Hence there is no such thing as individual immortality.

**Theory of Sensation.** Sensation is caused by the impact upon the sense-organs of effluences from the atomic clusters of which material objects are composed. These effluences are miniature atomic copies of the bodies that exude them. Penetrating through the sense-organs, they set the soul-atoms moving, and their various sizes, shapes, and degrees of roughness and smoothness set up the correspondingly different vibrations that compose our various color, sound, taste, smell, temperature, and touch sensations. Sensation is modified in different people by the individual peculiarities of their sense-organs. Also, damage done the atomic miniatures by the friction of the air and by collision among themselves helps to account for the distortions and variations that occur in our perception of objects at a distance.

**Epistemology.** But obviously the senses do not show us things as they really are. The colors, sounds, tastes, smells, and the like that constitute sensible experience are not in the atoms outside us, or even in the soul-atoms, but are vibrations of the mind-particles. Reason alone—and here Democritus is in complete agreement with the Eleatics and Anaxagoras—can see through the deception of the senses and make out the true nature of Reality.

However, the power of reason to reach the truth could no longer be taken for granted, as it had been by the earlier thinkers. Democritus lived in a period of intense skeptical distrust of the capacities and results of our reasoning process. The ability of thought to reach any universally true conclusions on any subject whatsoever was being challenged, and metaphysical systems especially were being riddled with objections by critics of no mean caliber. Democritus, then, found himself obliged to validate the possibility of knowledge.

This he did as follows. The senses, he said, were not our only means of contact with the external world. Some of the images given off by the atomic clusters penetrated directly to the soul-atoms, instead of being indirectly conveyed by the sense-organs. The images that reached the soul-atoms in this way were not confused by the sense vibrations which blurred the pictures forwarded *via* sight, sound,

touch, and the like. Hence they could set the mind moving in a way indicative of the true nature of their originals, and by imparting to it an unfalsified impression of the external world could give it real and trustworthy knowledge of the unseen structure of Reality.

**Ethics.** Finally, we find in Democritus the first attempt to construct not only a theory of knowledge, but a reasoned ethics as well. Unfortunately we have only the scantiest fragments of his moral theory. Enjoyment, he seems to have taught, is the end naturally sought by all men; pain the thing naturally and universally avoided. The useful and the harmful are defined in terms of pleasure and pain. All enjoyment, however, is not equally good. The pleasures of the senses, which are short-lived, agitating, and productive of surfeit or pain, are not so desirable as the calm, enduring, painless pleasures of the mind. Well-being and cheerfulness are the ends to be sought above all. Their attainment is dependent not upon wealth and good fortune and other external circumstances, but upon the cultivation of the resources of the soul, the treading of the middle path between excess and deficiency, and the contemplation of noble things. To distinguish, however, the true good from the false, a man must be wise. Virtue for Democritus was essentially a matter of the exercise of intelligence.

**Metrodorus and Anaxarchus.** Of the fortunes of the school founded by Leucippus and Democritus we know next to nothing. History has preserved the names of a few disciples and some scattered references to their views. The most prominent members were Metrodorus of Chios and Anaxarchus of Abdera. The latter was a teacher of Pyrrho, the founder of an important revival of skepticism that followed upon the close of the constructive period of Plato and Aristotle.

## VI. DIOGENES OF APOLLONIA

**Reassertion of the Homogeneity of the World-Stuff.** Perhaps we should not end this chapter without mentioning Diogenes of Apollonia—not that his system was original or particularly important, but because it illustrates, along with that of Archelaus of Athens, a tendency to combine the ideas of the never with those of earlier philosophies. His view, he tells us, “is, to sum it all up, that all things are differentiations of the same thing and are the same thing . . . they take different forms at different times, and return again to the same thing.”

The orderly character of the process by which the world-stuff is divided into many things and the balance and rhythm and regular

alternation which they display, and their disposal "in the best possible manner," prove that the world-stuff possesses intelligence.

And my view is that that which has intelligence is what men call air and that all things have their course steered by it, and it has power over all things. For this very thing I hold to be a god, and to reach everywhere, and to dispose everything and to be in everything . . . but there are many modes both of air and of intelligence. For it undergoes many transformations. . . . And the soul of all living things is the same, namely, air warmer than that outside us and in which we are, but colder than that near the sun. . . . And this warmth is not alike in any two kinds of living creatures, nor, for the matter of that, in any two men; but it does not differ much. . . . At the same time it is not possible for any of the things which are differentiated to be exactly like one another, till they all once more become the same. . . .

At the same time they all live, and see, and hear by the same thing and have their intelligence from the same source.

And this itself is an eternal and undying body, but of those things some come into being, and some pass away.

But this too appears to me to be obvious, that it is both great, and mighty, and eternal, and undying and of great knowledge.<sup>49</sup>

And further, there are still the following great proofs. Men and all animals live upon air by breathing it, and this is their soul and their intelligence. . . . While, when this is taken away, they die and their intelligence fails.<sup>50</sup>

**Cosmology.** We are also told that he believed the universe originated by the denser air massing to form the earth, which is round, by which he probably means disc-like, not spherical—while the lighter portions formed the other things, and the lightest of all the sun. The heavenly bodies were like red-hot pumice stones, through the pores of which our universe breathes. Meteors he accounted for on the supposition that besides the visible heavenly bodies there revolve invisible stones, which often fall and are extinguished on the earth.

## VII. REVIEW

We now review briefly the ideas developed by Greek philosophy up to date.

**1. What Is the World-Stuff?** Philosophy proper began in Europe, when in the sixth century B.C. the idea appeared that all things are

<sup>49</sup> Frs. 3-8 (Burnet, pp. 354-355).

<sup>50</sup> Fr. 4 (Burnet, p. 354).

parts of a single Reality, and that there is a world-stuff in which they all participate, and of which they are all made. The occurrence of this idea was accompanied by speculation as to the nature of the world-stuff. Early speculation consisted in picking out some one sensible thing, like the water of Thales, the general, undeterminate, boundless stuff of Anaximander, and the vapor of Anaximenes, which could be *seen* apparently changing into other things.

**2. How Does the Universe Arise from It?** At the same time, in the Milesian School the question arose as to how the universe was generated from and by the world-stuff. We do not know whether Thales touched on this point, or if so, how he dealt with it. But Anaximander suggested a process of separation and dissolution of opposites of whose interaction the world is the result; and Anaximenes proposed a process of condensation and rarefaction of the original vapor.

This hypothesis of Anaximenes, we noted, was prophetic of the view, soon to be developed, that all qualitative difference and alteration can be reduced to purely quantitative terms.

**3. Pythagorean Dualism and Number Theory.** Towards the end of the sixth century B.C. we saw Pythagoras and the early Pythagoreans, inspired by their interest and their discoveries in geometry, "mathematicizing" the world-stuff. They split it into two opposed fundamental principles, Limit and the Unlimited, whose interaction produced an indefinite number of geometrical points, different quantities and arrangements of which constituted different kinds of objects. This view they expressed by saying all things are Numbers. They also emphasized the difference between the odd and even series of numbers, in which they found the basis not only of physical but of moral opposites.

**4. The Problem of Change.** By this time the problem of change had become a philosophic issue, and doubts were being raised as to whether any *real* transformation of a single, homogeneous world-stuff, like that of the Milesians, into a multiple world full of a variety of things different both from it and from one another, was thinkable. Diametrically opposed attempts to solve this problem were made by Heraclitus on the one hand, and Parmenides and his Eleatic School on the other.

**5. The Heraclitean World-Stuff.** Heraclitus, defending the reality of change, multiplicity and variety, maintained that the world-stuff was essentially a process of transformation, and, seeking a world-stuff in itself volatile and in constant movement and alteration, he found it in Fire, whose essence is the process of combustion. Analyzing the implications of change, he proclaimed the identity of opposites,

and, noting the regular and rhythmic character of the world-process, he formulated a law or "wisdom" obeyed by Fire in its cycle of transformations, which he called the Upward and the Downward Ways. To the tension set up by the pull of these ways against one another he attributed the stability of the cosmic structure, and to the alternation of their prevalence over each other, the tendency of nature to oscillate between opposites.

**6. The Eleatic View of Reality.** Parmenides and the other Eleatics, Zeno and Melissus, denied the reality of change on the ground that existence as such cannot be logically conceived as coming into being or passing out of being, or altering or varying or multiplying the fact that it *is*. Since it alone exists, it cannot come from anything, be divided by anything, change into anything or be destroyed by anything except itself—which is tantamount to saying that it is uncreated, indestructible, invariable, single, and homogeneous throughout. Nor can it move spatially since there is no emptiness for it to move in. It is a compact, continuous *plenum*—a spatially extended, solid sphere, in Parmenides' opinion. Hence variety, multiplicity, change of quality and place, generation and destruction are all *false* opinions men hold regarding the nature of the Real.

Parmenides' pupil Zeno defended his master's position in a series of famous paradoxes showing the self-contradictory consequences that followed from admitting the reality of motion. And Zeno's follower, Melissus, argued against attributing variety and multiplicity, as well as spatial movement, to the Real by showing up the logical absurdities that resulted.

**7. Pluralistic Attempts to Reconcile Sensible Phenomena with Eleatic Logic.** Meantime, inspired by a respect for Eleatic logic, as well as by a desire to find a *real* place in the universe for multiplicity, variety, and change of quality and place, others were proposing systems that adopted different forms and degrees of one and the same expedient. This expedient was that of dividing the simple, homogeneous, continuous, unchanging, and motionless Reality of Parmenides into a number of elements, incapable of internal division, variegation and change, but capable of spatial movement and arrangement in different combinations in terms of which the qualitative differences and transformations of the sensible world could be expressed and understood. These systems were those of Empedocles, of Anaxagoras, and of Leucippus and Democritus.

**8. The Four Elements Moved by Love and Strife.** Empedocles quartered the Parmenidean sphere into four elements, Fire, Air, Water,

and Earth. The formation of worlds, he argued, was due to the alternating commingling and separation of these elements under the influence of the two principles of Love and Hate. Universes occur in the intermediary stages of conflict and relative balance between Love and Strife, before either complete separation or complete commingling has been accomplished. Empedocles regarded the Real as a *plenum*, a fact, however, he thought compatible with movement.

**9. Elements Moved by Mind.** Anaxagoras pulverized Eleatic Being into as many constituents as there are different qualities and classes of things, or, at any rate, as there are fundamental opposites. None of these kinds of particles, however, were completely pure, with the exception of those of Mind. The others each contained some slight admixture of everything else. Mind, however, was not only unmixed, but was the only thing whose particles were inherently in motion. And it set the other elements moving. Like Empedocles, Anaxagoras thought of Reality as compact, continuous and completely full, and like him felt that under these conditions change of place and of arrangement of its constituents was still possible.

**10. Elements Reduced to Atoms.** Leucippus and Democritus pulverized "what really is" into an infinite number of atoms, Eleatic in their internal character, and devoid of all qualities and differences except those of size and shape. All the atoms are everlastingly in motion of their own nature, flying about hither and thither, and it is due to their clusterings and dispersions and to the formation of vortices by the component motion of their collisions that universes are generated. This generation is entirely "mechanical" and unpurposive, controlled and directed only by impact, with resultant agglomeration and modification of movement. Unlike Empedocles and Anaxagoras, Leucippus and Democritus considered change of place in a *plenum* impossible, and asserted the equal reality of the void or empty space.

**11. Various Religious Views.** Along with these theories of the nature of the universe, we find interesting views about religion and speculation in the fields of astronomy, biology, physiology, psychology, and the theory of knowledge, and in the case of Democritus in ethics. All the philosophers so far treated appear to have been skeptical of the orthodox theology. All applied the term *divine* to the world-stuff and the universe, and seem to have attributed to the Real mental and animate qualities (soul) suffused throughout it. The Pythagoreans and Empedocles were also influenced by the Orphics and taught the transmigration of souls—a doctrine out of step with their other teach-



ings regarding the soul. The others either ignored the question, so far as we know, or constructed systems with which personal immortality was inconsistent—with the possible exception of Heraclitus, if we can interpret his allusion to a “greater death” and to men being cooled-off gods and to gods being heated-up men as indicating a belief in transmigration.

**12. Astronomical Speculations.** We noted also interesting astronomical speculations. These, for the most part, were alike in their essentials, and proved to be blind alleys, so far as the future was concerned. But the Pythagoreans asserted that the earth was spherical, not flat, displaced it from a central position in the universe, and had it revolving, not about the sun to be sure, but, along with the sun and the other heavenly bodies, about a “central fire.” Besides these astronomical speculations we found many meteorological observations.

**13. Biological and Physiological Studies.** Biology and physiology as well came in for their share of investigation. Theories in line with the modern doctrine of evolution, deriving life from a primeval slime, and asserting the slow *development* of species into their present forms, had been proposed, most notably by Anaximander and Empedocles. The structure and operations of the human body were studied, and the process of reproduction was discussed at some length, and Empedocles’ theory of respiration was prophetic of the later discovery of the circulation of the blood.

**14. Psychological Theories.** We found also the beginnings of psychology. Sensation and thinking, at first referred to the world-stuff in general, became objects of special study. The Pythagoreans taught that the soul is a “harmony” of the body, but held also the doctrine of the transmigration of souls. Empedocles, while also holding that doctrine, connected sensation and thought with the blood, particularly the blood nearest the heart. Anaxagoras and Leucippus and Democritus segregated them in soul-particles, purer, finer, and more mobile than the other constituents of the world-stuff. These last three also had well-developed theories of the nature of sensation, and of the operation of the sense-organs, Empedocles maintaining that perception is of like by like, Anaxagoras, that it is of unlike by unlike, and Leucippus and Democritus, that it is due to the impact of atoms upon the sense-organs and the consequent vibrations set up in the soul-atoms in the body.

**15. Theories of Knowledge.** The nature of knowledge, too, was being discussed. The Eleatics set up logical tests of truth and reality, which determined the trustworthiness of perceptual evidence, and

these standards were generally accepted by the later philosophers we have so far mentioned. And Democritus made an explicit attempt to defend the validity of knowledge against skeptical attacks. He also had, apparently, elaborated a system of ethics.

**16. Prevalence of General Curiosity over Special Interests.** Finally, we may repeat of all the systems we have described what we said in discussing the general characteristics of the Milesian School—that they were motivated by general curiosity about the nature of Reality rather than by a desire to find the Real such as would satisfy religious or moral preferences respecting its character.

## *Chapter VIII*

# THE SOPHISTS

### I. THE RISE OF SKEPTICISM

**Distrust of the Senses and Reason.** Periods of intense philosophic speculation and feverish constructive activity, like the one we have just been recording, are apt to be followed by skeptical reactions in which the achievements of the past are riddled by a fire of hostile criticism, and the established beliefs and standards of the day tend to collapse, temporarily, at least. Metaphysical inquiry, being the biggest gamble of all the philosophic industries, generally suffers first and worst, and little or no stock is taken, for the time being, in its results or possibilities. A philosophic reaction of this sort occurred in Greek thought towards the middle of the fifth century B.C. The constructive cycle was at an end, and a period of salutary criticism and deflation of metaphysical pretensions was needed before the work of rehabilitation could begin on a sounder, a more comprehensive, and a grander scale.

There were many causes of this skeptical turmoil in which not only metaphysics but all established beliefs and standards, religious, scientific, moral and political, were called to account. There had been only too obvious difficulties and self-contradictions in each of the older systems, and all those systems had flatly contradicted one another. The untrustworthiness of the senses had become notorious, and the ability of reason to correct their deceptions was doubtful. Moreover, reason, as exercised by different thinkers of apparently equal eminence, led to diametrically opposed conclusions. So its prospects of reaching and grasping the truth by the exercise of its own, native ability did not appear particularly bright.

The sense of relativity that might well have been provoked by contemplation of the philosophic scene could not but have been reinforced by the temper of the times. The growth of trade, the increase of travel, and the awakening interest in the geography and history of other lands disclosed the difference, and even the opposition of religious beliefs, political and social conventions and institutions, stand-

ards of taste and ideas of moral right and wrong, all of which seemed to work equally well in their respective communities and times. And this disclosure was bound to make men skeptical of the absoluteness or even the superiority of the particular views and ways to which they had happened to be born and bred.

**Rise of Athenian Democracy.** Nor was any assurance of permanence or universality to be had from the spectacle of affairs at Athens, to which the center of philosophic gravity had now shifted from Ionia and Magna Graecia. There, after the death of Pericles, democracy had run riot, with the inevitable results—results intensified if anything by the long drawn-out agony of the Peloponnesian War. The rich and the poor were busy cutting each other's throats in the name of the same immutable justice, and the Assembly and the Law Courts were swayed from day to day by contradictory and reversible passions and prejudices in the name of the same everlasting right and truth. There was, then, no need of the disagreements of the philosophers, or the lessons of history and geography to teach the lesson that nothing is certain or universal or lasting or absolutely valid. A day in his own courts or town-meeting was enough to show any Athenian that.

The philosophic formulation of this skeptical attitude fell to a class of men that conditions of modern life at Athens were fast bringing to the fore. The Athenian democracy governed both the city and the empire directly in town-meeting, not through elected representatives. Moreover, there were no lawyers, and each citizen had to plead his own case in court. In such circumstances skill in debating was an urgent necessity for any man who wished to defend his property, his interests, and perhaps his life against hostile forces; not to speak of a man who wanted to forge ahead, impose his views and his will upon his fellow-citizens, and succeed in the struggle for existence. Practical issues were to the fore, and teaching had to turn practical to meet them. The dominant art was now the art of worldly success, and instruction in this became the Alpha, and only too often the Omega, of education.

**Rhetoric and Its Teachers, the Sophists.** So it was that there arose in Greece a class that devoted itself to the teaching of *rhetoric*, or the art of persuasion, upon the mastery of which worldly success so largely depended. The ministers of this new gospel of utility and "business first" were known as *Sophists*, or "wise ones"—a term also rather indiscriminately applied to philosophers, bards, music teachers, poets, and prose writers. But they lived up to the name, in theory at any rate, for, in order to prepare their pupils for success in the rough-

and-tumble of business and political life, they had themselves to be thoroughly conversant, not only with rhetoric in all its branches, such as grammar, diction, logical argument, and appeal to the emotions, but also with constitutional, civil, and criminal law, and parliamentary procedure. Furthermore, they must keep their ear to the ground and know everything that was going on behind the scenes, if they were to give expert advice to their clients.

For their services the Sophists charged fat fees, and to this custom we may trace a part of their unpopularity in antiquity, and of the general opprobrium that hangs about the terms "sophist," "sophistry," "sophistic" and the like in modern times. To the Greek way of thinking the acceptance of pay for teaching was an "unethical" practice; just as today the taking of contingent fees by a lawyer or the patenting of a medical discovery by a physician is viewed with disfavor. Moreover, it must be remembered that the prejudice against receiving money for literary production lingered in Europe well into the nineteenth century.

**Unscrupulousness of the Sophists.** Again, this habit turned the Sophists into servants of the rich, and allied them with the classes against the masses, since naturally they put themselves at the disposition of the highest bidder. The irritation that they thus aroused was intensified, at Athens at least, by the fact that so many of them were aliens. Nor was their influence upon the youth of the day—whom they seemed to be infecting with their irony, their cynicism, their sharp tongues, and their suspected "foreign" broad-mindedness and irreligion—calculated to enhance their reputation with the conservative Athenian elders. Finally, they were exercising their talents and drawing their pay in a field that lay closest to the Greek heart—the field of politics—and were professionalizing an activity that had hitherto been regarded as an amateur sport. To rely upon a paid coach for help in winning a case or getting a law passed was not fair play.

To our eyes, however, the worst part of the charge against the Sophists lies in the accusation that they were corrupters of youth in that they made the worse cause appear the better and the better the worse; in other words, that they were unscrupulous in their methods and taught their pupils how to win at all costs and by whatsoever means. This indictment, which used to be accepted as generally true by historians of philosophy, is now largely discredited, so far, at any rate, as the more eminent members of the profession are concerned. Undoubtedly, there were small fry who were willing to help win shady cases and to resort to dishonest tricks to gain their ends. It was

their behavior, probably, that brought the whole profession into disrepute. Certainly, no reproach of that sort ever attached to the two great philosophers, Protagoras and Gorgias, whom the group produced.

**Sophists and Morality.** Nevertheless, even these men succeeded in giving an artificial and superficial look to moral conduct. Protagoras felt that moral behavior could be taught much as grammar or arithmetic could. A set of precepts telling you how to act to your own best advantage could be memorized and applied. However admirable these precepts might be, they sat rather loosely upon the mind. Morality was just one subject among many, on a par with mathematics or correct speech, and it could be taught a man by rote, as they could. Furthermore, Gorgias insisted that moral precepts had no essential unity and no general applicability. Their suitability was not the same for child and adult, slave and free, rich and poor. The different stations in life had each its appropriate code. Virtue was many, not one. We could speak of the virtues, but not of virtue in general. On the whole, then, Protagoras and Gorgias tended to undermine the authority of moral standards, even though their conduct and their teaching of what actually constituted right action were exemplary.

## II. PROTAGORAS

Protagoras, born in the early part of the fifth century, was a fellow townsman of Democritus, somewhat the older of the two. He began life as a porter, but his intelligence and his ability to read and write soon enabled him to become an itinerant teacher. When he was about thirty he left Abdera and wandered through Sicily and Magna Graecia, gathering fame as he went. Eventually he turned up in Athens, where his success was great and immediate. He became an intimate of the Periclean circle, and quickly amassed a large fortune by his lectures, not to speak of an enthusiastic band of pupils and disciples. His last years are somewhat obscure. It used to be thought that his views got him into difficulties and that, exiled from Athens, he was drowned on his way to Sicily. His writings, too, were said to have been burned by public order. But there is also an alternative theory that he lived and died in good enough odor, and that his works were read long after his death.

**Man the Measure of All Things.** However that may be, of all his writings scarcely a dozen fragments have come down to us, and of these two only are important. One of them, from his treatise *On the*

*Gods*, simply states that with regard to the gods he "cannot feel sure that they are, or that they are not, nor what they are like in figure, for there are many things that hinder sure knowledge, the obscurity of the subject and the shortness of human life." The other, the more famous, amplifies this religious agnosticism into a denial of the existence of any absolute and universal truth, one and the same for all individuals in all times and places. "*Man*," he says, "*is the measure of all things, of things that are that they are, and of things that are not that they are not.*" In other words, truth is a purely relative and subjective affair. What *seems* true or false to a man *is* the only truth or falsehood he can know anything about. What *appears* to him to be real or unreal *is* real or unreal so far as he is concerned. And that is all there is to it. There is no means of measuring my truth against yours, and no warrant for saying that what seems true to me is truer than what seems true to you. Each man is his own final court of appeal. There is no higher authority to which the claims of conflicting views can be submitted for a binding decision.

**The Relativity of Truth.** Moreover, as his opinions change, so each man's truth will change. What appeared true yesterday looks false today. Very well, what *was* true for the individual *is* now false for him. Not only, then, is truth that which appears true to the individual, but that which appears true to him at the moment. And just as there is no ground for asserting that one man's truth is truer than another's, so in the same individual there is no possible means of measuring the truth of one moment against that of the next. Whatever it is that seems true is true so long as it seems so and no longer. All of my shifting opinions are equally true for me during the time that I hold them and equally false after I have discarded them. From the instant, as from the individual, there can be no appeal to any permanent and universal standard of what is so and what is not.

Since, then, what seems true to a man is the only truth he can possess, and since this truth is at variance both with the truths of other men and, from moment to moment, with itself, metaphysical speculation is idle, and its results are worthless. There is no "reality" that reason can know except the ever-changing flux of sensible experience, and even if there were, there would be no way of knowing which philosophical system most closely approximated it. All systems appear equally true to their respective adherents for equally convincing reasons, and men are continually changing their systems and clinging with equal tenacity and conviction now to this philosophy, and at the next moment to another.

These conclusions were apparently reinforced by, if not actually based upon the Heraclitean teaching. If everything was in flux, then perceiver and perceived alike were in constant change. Sensation was due to a momentary contact between them which gave rise to a flash of sensation. But the instant the collision between sense-organ and perceived object was over, the sensation in the perceiver disappeared and so did the corresponding quality in the object. The next minute both subject and object had altered their characters. Hence in both of them, the sensation or the idea of the moment was true only of the instant in which it took place.

### III. GORGIAS

The skepticism of Protagoras was ably seconded by the other great Sophist philosopher, Gorgias, from Leontini in Sicily. Prominent in his native town as a master of the art of persuasion in its most eloquent and flowery form, he was chosen by his fellow citizens to head an embassy sent in 427 B.C. to Athens to enlist aid in the struggle of Leontini against her powerful neighbor, Syracuse. Once arrived, he was so taken with the charm of the city that he settled there, and, by virtue of his gift of silver-tongued oratory, his statesmanlike vision, and his general culture, became a bright star in the twilight of the Periclean Age. He was also greatly interested in science and ethical problems. Later on, it is said, he went to the court of Jason of Pherae in Thessaly, where he lived to be nearly a hundred years old.

**Knowledge of Reality Beyond Sense-Experience.** Of metaphysical speculation regarding world-stuffs and "ultimate realities," Gorgias was no less suspicious and critical than Protagoras. In a work called *On Nature or the Non-existent*, he challenged the power of reason to discover any reality beyond the flux of sensible experience. To support his thesis he fell back on the self-contradictions that arise from the logical necessity of conceiving the Real as both one and many, created and uncreated, finite and infinite in space and time. The only escape from these paradoxes lay, he said, in supposing that Reality is neither one nor many, infinite nor finite, created nor uncreated—which is equally absurd. Hence the Real cannot exist. Furthermore, if a world-stuff existed, we could never know what it was like. It is not what it appears to be, since the senses are notorious liars. Nor need it be what reason thinks it is, since thought can conceive the non-existent as readily as it can the existent, and possesses in itself no criterion for



distinguishing such of its ideas as may refer to real existence from those that may be pure creations of fancy.

Finally, even if Reality could be known, knowledge of it could not be communicated to others. For we are dependent upon language for sharing our ideas, and language is mere noise. But how can a noise transfer from one mind to another knowledge of a reality that is not a noise? How can the optical sensation *red*, for example, be communicated by the audible sensation of the spoken word "red"? The word is quite different from the color. In the same way, whatever my concept of the truth may be, the words by which I seek to convey it are quite unlike it, and I cannot be sure that they arouse in my neighbor's mind a concept in any way similar to my own.

#### IV. ETHICAL AND POLITICAL IMPLICATIONS

**No Universal Moral Standards.** The arguments advanced by Protagoras and Gorgias were destructive not only of metaphysical speculation; in the field of ethics they were equally destructive of the authority of all moral and social standards and institutions. For, if each man is the measure of all things, he must be the final arbiter of what is good, as well as of what is true. What seems right or wrong to him *is* right or wrong so far as he is concerned, and there can be no valid ground for quarreling with him. No one can lay down the moral law to another, since there is no moral law to lay down. Universal and authoritative standards of right and wrong are as non-existent as universal truths. Each man has the same right to do what seems good to him as he has to believe what seems true to him. No one has any right or reason to reprimand him. The only argument is force.

**Callicles. Might Is Natural Right.** There is no evidence that Protagoras and Gorgias ever applied the logical consequences of their doctrine to ethics. Indeed, they were apparently highly respectable and respected pillars of the established moral and social order. But there were plenty of people to make the application, and presently we shall find Socrates and Plato combating ethical and political views directly derived from the Sophistic skepticism. For instance, the Athenian politician, Callicles, argues that conventional morality is designed by the inferior, "the many weak," to keep the superior, "the few strong," in check; "whereas nature herself intimates that it is just for the better to have more than the worse, the more powerful than the weaker." True morality, the ethics sanctioned by nature, teaches that justice,

or as we should perhaps say today, righteousness, "consists in the superior ruling over and having more than the inferior."<sup>1</sup>

**Thrasymachus and Nature of Right.** The Sophist, Thrasymachus, was even more extreme in his deductions. Callicles, after all, had maintained that there was such a thing as a natural morality, a standard of right and wrong countenanced by nature, though this standard reversed the ordinary ideals of good conduct. But for Thrasymachus there is not even a natural right that the superior should rule over and have more than the inferior. Whoever happens to be on top is so by accident, not by right, and the arbitrary will of those in power decides what shall be considered virtuous and what vicious. Moral principles are obviously determined with a view to the pleasure and profit of the ruling party, so that righteousness is "nothing else than the interest of the stronger."<sup>2</sup> Good and evil are simply legislated into existence at the caprice of the lawmakers and have no being apart from their say-so. Different groups or forms of government lay down different rules suited to their different advantages, and as a result the saint of one day is the sinner of the next, and *vice versa*.

Plainly, then, if philosophy was to be rehabilitated, new and sound foundations had to be discovered for an authoritative truth and right. Plainly, too, man's attention had been shifted from the spectacle of external existence to himself so far, at least, as knowledge is concerned. His mind was the measure of all things, and the relative and inaccurate nature of that measure had been exposed. Not only had the hope of reaching a common truth been blighted, but faith in the ordinary standards and institutions of human life had been called upon to justify itself and had failed to do so. Was there, then, any way of standardizing the mind that measured all things and of restoring confidence in the value of its judgments? Socrates and Plato thought there was. To their work of reconstruction we now turn.

<sup>1</sup> Plato, *Gorgias*, 483 B ff. (trans. Jowett).

<sup>2</sup> Plato, *Republic*, I, 339 A.

## Chapter IX

# SOCRATES

### I. LIFE

Socrates (born about 470 B.C.), the first Athenian-born philosopher, was the son of a respectable and well-to-do bourgeois couple, a sculptor and a midwife. Brought up probably with a view to following in his father's footsteps, he showed at an early age the dreamy and mystical temperament and the unbusinesslike proclivities of his later life. He was in the habit of falling into "brown studies" or trances, which sometimes lasted a long time, and he believed he possessed a sort of familiar spirit whose warning voice admonished him when he was about to do anything wrong. He was a man of great moral courage, whom no arguments or threats could turn from the course he believed right. Twice he defied the government in power at the risk of his own life—once when as presiding officer he refused to sanction the trial *en masse* of the Athenian generals who had abandoned the dead after the battle of Arginusae; and again later when he declined to enforce an illegal order of the Thirty Tyrants. And in the campaigns in which he fought he showed himself a brave soldier. But, for all his high principles and strength of mind and purpose, he was no prude or prig or ascetic. Temperance in all things was for him the rule of right and happy living. He loved human life and especially the city streets and the market place. He was gay, kindly, genial, witty, a great talker and a famous diner-out. And most of his friends he could drink under the table without so much as turning a hair himself.

**His Disciples.** Of his philosophic education we know little for certain. He seems to have had a fair acquaintance with the work of the preceding thinkers and to have been particularly impressed by the religious, Orphic side of Pythagoreanism. His own temperament predisposed him to a belief in the immortality of the soul and in the existence of a divine Providence which ordered all things for the best. At an early age, apparently, he had already gathered about himself a circle of disciples to whom he expounded his views. This circle numbered at one time or another the beautiful Charmides, an uncle

of Plato's, who eventually introduced his nephew to Socrates; Critias, a cousin of Plato's mother, and later a leader in the usurpation of power by the Thirty Tyrants; the brilliant and shiftily Alcibiades; Xenophon, the leader of the Anabasis; and a number of Pythagoreans of some note.

**The Socratic Method.** Also, it would appear that by this time he had developed his own peculiar and famous method, the method of question and answer. This lay in buttonholing passers-by, asking them questions, picking their answers to pieces, demanding more and more clear and definite replies, and thus slowly wringing from the wretched victims of the inquisition either a confession of ignorance or a final definition of the subject under discussion that would hold water. As Socrates was accustomed to try out his method on those who considered themselves exceptionally wise, and frequently made fools of the elders in the presence of their children, he did not add to his popularity with the older generation. But he attracted crowds of young men, who loved to trail about the streets with him and to be in at the death when he engaged in conversation and discomfited some self-important citizen.

By the time he was thirty-five this habit had become a kind of religious mania with him. An admirer of his, inquiring of the Delphic oracle, had been told that there was no man wiser than Socrates; and Socrates, conscious of his own ignorance, had interpreted the reply as meaning that wisdom lies in knowing how little one really knows. It was his duty, as he conceived it, to drive home this lesson to the Athenian people. It was his mission, laid upon him by Apollo, to be a kind of gadfly stinging his fellow-citizens to a realization of their shortcomings. So he set about his preaching with a new and mystical fervor, inspired by a sense of divine favor and command.

**His Growing Unpopularity.** The Athenian people, however, were not in the best mood to be stung, exasperated as they were by the interminable Peloponnesian War which ended in the collapse of the Empire. And Socrates' stinging found their tenderest spot—their form of democratic government. Day in and day out he exposed and ridiculed the follies and vices of the popular regime. Not only that, but his affiliations were largely with men who had earned the hatred of their fellow-citizens; such as Alcibiades, the instigator and leader of that final catastrophe, the Sicilian Expedition, and Critias, the leader of the Thirty Tyrants, who had seized the power when the city eventually capitulated to Sparta. Moreover, religiously he had come to be suspect. His voices and his trances, and his ideas regarding the im-

mortality and transmigration of the soul might be forgiven him. But it was possible that he was mixed up with some secret, international Orphic-Pythagorean cult at variance with the established religion. Nor could one forget that some of his most intimate friends had been suspected of the blasphemous mutilation of the hermae, or statues of Hermes, erected as a kind of wayside shrine at the corners of the city-streets, and again of parodying and profaning the Eleusinian Mysteries in their houses. All in all, he was an undesirable citizen, a nuisance to the old and a danger to the young.

**His Arrest, Trial, and Death.** As the weight of all this resentment accumulated against him, Socrates became more and more unpopular, and the charges that were eventually brought against him slowly crystallized in men's minds. He was worshiping strange gods, and he was corrupting the youth of the city by his non-conformist and particularly by his anti-democratic teachings. The storm broke shortly after the Thirty were overthrown, and the democracy returned to power. In 399 B.C. he was arrested and formally charged with impiety and corruption of the young. Behind these accusations lay thirty years of growing dislike and irritation and of very real alarm at his influence. To this, rather than to any specific evidence, his condemnation was due. He was sentenced to death, but given the option of proposing another penalty. He retorted that if he were to get what he deserved, he ought to be maintained for life at the public expense like the winner of a chariot-race at Olympia. He could not afford to pay a large fine, but his friends had scraped together a small amount. Would a fine of that size satisfy the court? He was promptly sentenced to death. In the two months that elapsed between the sentence and its execution, Socrates could easily have escaped. But he refused to do so on the ground that it was wrong to disobey even an unjust law. Of his last hours, spent in conversing about immortality with his friends, and of his drinking of the fatal hemlock, Plato has given us an account in the *Phaedo*.

## II. OPPOSED PICTURES OF THE SOCRATIC TEACHING

**Socrates' Interest in Metaphysics a Disputed Point.** Whether or not, and to what extent Socrates shared the Sophists' disdain of metaphysics and world-stuffs is a moot point, which involves the question, also disputed, of Plato's relation to the doctrines he puts into Socrates' mouth in the earlier dialogues. Until recently it has been supposed that Plato merely used Socrates as a vehicle to express his own views, and

that we must look to the *Memorabilia* of Xenophon—the leader and historian of the Anabasis, and also one of the Socratic circle, for the most reliable account of the Socratic teaching. Lately, however, this view has been challenged, and it has been suggested that Plato for a long time acted merely as a historian, and that the teachings put into Socrates' mouth in all the earlier dialogues, including even the *Phaedo*, the *Symposium*, and the *Republic*, were really Socratic rather than Platonic in origin.<sup>1</sup>

If we adhere to the former view, we must think of Socrates as primarily a moralist rather than a metaphysician, preoccupied with ethical problems and with determining the kind of conduct most conducive to the best interests of mankind, and possessed, at the best, of only a moderate and derivative interest in metaphysical questions, if not of the Sophists' disdain of them. If, however, we believe that the earlier Platonic dialogues are an account of Socrates' own teaching, then we must regard him not only as a moralist but as a metaphysician with a well-developed system, yet largely influenced by ethical considerations. To these possible metaphysical views, we shall return in a moment, after describing his ethics. And in any case, we may be reasonably sure that even if he shared the metaphysical skepticism of the Sophists, he did not follow them in their religious agnosticism. Though apparently he did not take literally the orthodox theology, he was religious in temperament and believed, as we have seen, in immortality and in a beneficent Providence ordering all things for the best.

### III. SOCRATES' ETHICS

**Denial of Sophistic Relativism.** Moreover, as a moralist, vitally interested in discovering the true human good, he could not for a moment accept the ethical implications of the dictum that the individual man is the measure of all things. Superficially, to be sure, moral standards might seem conflicting and relative, with no hint of universal validity and authority beneath their hopeless variance and antagonism. But apply the Socratic method to the situation by sufficiently analyzing, comparing, and redefining the differing standards of different individuals, and you would find these standards all slowly converging towards points of agreement, and would eventually extract from them a definition of virtue common to them all, and a universal rule of right and wrong, applicable to all individuals in all times

<sup>1</sup> This is the view of Burnet.

and places. Good and evil, right and wrong, looked purely conventional, arbitrary, and relative, simply because men were over-hasty in their conclusions, and did not stop to weigh their answers and expound their exact meaning when they sought to define justice or temperance or any other virtue. Universal ideas, standards, and laws were there, if only men would stop long enough and take sufficient pains to discover them.

The prerequisite of such discovery was a rigorous self-examination. The celebrated inscription on the temple of Apollo at Delphi, "Know Thyself," was the beginning of wisdom. The first fruits of its application were to clear away ignorance and folly and superstition and prejudice, and to lead a man to realize how second-hand and second-rate most of his so-called knowledge really was. Then would come the work of reconstruction of a true wisdom founded upon notions that had been found to be common and acceptable to all men alike.

**The Metaphor of the Midwife.** The discovery through conversation and argument of such basic universal ideas lying hidden in the human mind beneath the welter of prejudice, partisanship, and bigotry, might be well pictured as a kind of begetting and bringing of these ideas to birth; and Socrates, influenced perhaps by his mother's profession, described his part as that of a midwife. It was his business to help deliver the mind of the true definitions, with which it was always pregnant and which it was forever laboring to bring forth. The travail must necessarily be long and halting, obstructed by self-assurance and self-righteousness, but the wider good, the right and wrong upon which all men could agree, lay in the womb of every man's soul, waiting to be born.

**Virtue a Natural Endowment.** Virtue, then, was a natural endowment, an innate propensity in mankind, not an artificial convention or habit of action to be acquired through education, as the Sophists had maintained. It could indeed be taught, but only if we regarded instruction in it, not as an introduction from without of a course of behavior foreign to our nature, but as a revelation to the soul of her own inborn disposition. In showing a man how to be virtuous, you showed him how to be true to his own self; you did not show him how to be untrue to it for reasons of expediency.

Again, the several virtues could not be a mere disconnected set of precepts, as Gorgias had taught, differing in their applicability according to age, sex, and station in life. They all could be boiled down to knowledge of one's own best interests, and this knowledge was one

and identical in all individuals under all conditions. Virtue, in short, was one, not many, and the seemingly different virtues were merely different aspects of a single thing.

If, however, self-knowledge was the beginning of wisdom and virtue, it might also be regarded as the end thereof. Since man was a rational being, and presumably actuated by self-interest, he would naturally do what was best for him if he but knew what that best was. Virtue, then, from start to finish depended on knowledge, and could be defined as such. So we reach the famous Socratic assertion that *virtue is knowledge*, and that if only men can be brought to see what the better course is they will spontaneously follow it.

In this definition and this confidence Socrates was a victim, perhaps, of the rationalistic attitude of the Greeks toward ethical problems. He did not give sufficient weight to the power of instinct, and passion, and the desire of the moment, to fly in the face of the true good, even when our best interests in the long run are clearly perceived. Over and over again, we do wrong knowingly. As the poet Ovid sings, we know and approve the better course, but follow the worse.

But there is also another, graver difficulty with Socrates' saying that virtue is knowledge. Knowledge, we instinctively retort, of what? Knowledge, Socrates replies, of what is good for us. But what is good for us? If we answer, as we are tempted to do, that virtuous behavior is good for us, then we are simply saying that virtue is knowledge of what is virtuous, and have fallen into the vicious circle of defining a thing by itself. To extricate ourselves, we must determine what it is that constitutes goodness and makes knowledge of it virtuous.

In dealing with this question we come up against the dispute as to whether Xenophon or Plato gives the truer picture of Socrates.

**Dispute over Socrates' View of the Good.** If we look only to the *Memorabilia* for Socrates' real views, we shall feel that he answered the question, What is the good? in terms of practical utility. Virtue is knowledge of what is useful for man, and man finds useful that which gives him the greatest pleasure and benefits him most in the long run. Law and order, we are told, are better than lawlessness and disorder because they make the state and the individual more prosperous and more secure and "more honored at home and abroad." Continence and temperance are good, because self-control alone has "the power to give us any pleasure worth remembering," whereas through lack of it we are "cut off from the full fruition of the more



obvious and constantly recurring pleasures.”<sup>2</sup> Even beauty lay essentially in appropriateness and service to a particular use.

From this point of view virtuous behavior is behavior calculated to ensure us security, comfort, prosperity and respectability. Much, too, in the Platonic account of Socrates countenances such an interpretation. There he is depicted as insensitive to the beauties of nature and as regarding art and literature as worthless and even dangerous except as they point a moral lesson.

If, however, we accept Plato as a historian of Socrates’ real teaching, we can amplify the picture. His attention is now fixed, not upon the profits of virtue here below, but upon righteousness as the means of opening the eyes of the soul to the glories of a realm of being that transcends sense. This realm is not one of world-stuffs, but of immaterial and intelligible Forms, the absolute natures of Temperance and Justice and Beauty in themselves, laid up in a heaven from which the soul has descended and to which, after the suitable discipline and preparation of virtuous living, she may eventually return. The universal and immutable notions of right and wrong, which it is Socrates’ business to discover in and elicit from men’s minds, are of divine origin. They are memories of the soul’s converse before birth with the bright and perfect Forms of what is absolutely and wholly good. In this realm of real and perfect being the soul’s true home lies. Thither she must bend all her efforts to repair, resisting the allurements of sensible beauty and contemplating those things and doing those deeds only that will speed her on her journey.

But, in any case, whether we regard Socrates as a metaphysician or as interested only in ethics and logic and willing to take immortality and the existence of a divine Providence on simple faith, the fact remains that he seems to have left the nature of the human good a wide-open question and to have bequeathed a problem rather than a solution to his disciples. For immediately upon his death the questions “What is virtue? What is the human good?” became burning ones, to which his followers gave diametrically opposed answers, all claiming to be the true interpreters of the real meaning of his teaching. To these divergent interpretations we now pass.

<sup>2</sup> *Mem.*, IV, 4, 13 ff. (trans. Dakyns).

## Chapter X

# THE LESSER SOCRATICS

### I. THE MEGARICS

One of the most fervent disciples of Socrates was Euclid, a citizen of the neighboring and hostile town of Megara. Because of the enmity existing between Megara and Athens, which culminated in an Athenian decree forbidding any Megarian to enter not only the capital but any port in the Empire, Euclid had to visit Socrates secretly, disguised, it is said, as a woman. He was present at Socrates' execution, and afterwards many of the Socratic group, including Plato, sought refuge at his house when Athens for a time, because of anti-Socratic feeling, proved too dangerous for them to live in.

**Euclid's Identification of the Socratic Good with Eleatic Being.** Euclid had been philosophically "raised" in the Eleatic tradition, and had a great veneration for Parmenides. His association with Socrates did not alter his earlier views, but only served to confirm them, and indeed threw new light for him upon the nature of Being. For the Socratic "good," to which all the seemingly different virtues could be reduced, possessed all the earmarks of Eleatic Being. It was one, simple, homogeneous, unalterable, indestructible, the same in all times and places, for all sorts and conditions of men. "What really is," then, is the good. Men might call it by different names, to be sure, such as wisdom, God, mind, and the like, but these were mere tricks of speech. Nothing but the Good could really exist, since it alone lived up to all the specifications laid down for what is real, and anything opposed to or different from it was a matter of false opinion and illusion.<sup>1</sup> Of anything further that Euclid may have said about the nature of either Eleatic Being or the Socratic Good we have no record.

**Continuance of the Eleatic Tradition by Euclid's Followers.** The followers of Euclid delighted in logical hair-splitting, and in raising questions like our familiar catches, Have you left off beating your

<sup>1</sup> Cf. Diogenes Laertius, II, x, 116; Zeller, *Socrates and the Socratic Schools*, pp. 222 ff.; Gomperz, *Griechische Denker*, IV, 8, § 2.

grandmother yet? How many hairs must a man lose to be bald? How many grains does it take to make a heap? They also carried on the Eleatic polemic against the reality of the many. Since you cannot tell where the few leave off and the many begin, and, since there can be no limit to them, where the many end, there can be no logical definition and hence no existence of the many. Motion, chance, creation and annihilation, and even the concept of possibility itself were subjected in like manner to a rigorous and skeptical overhauling.

## II. THE CYNICS

**Antisthenes.** Antisthenes, the founder of the Cynic School, was born at Athens early in the fourth century. He was by nature a rough customer. Uncouth, disdainful of the amenities of life, and in many respects stupid, he began early in his career to affect the rude and unconventional ways for which his School was afterwards famous. He defiantly carried the beggar's staff and wallet to signalize his independence of spirit, and persisted in ostentatiously confining his dress to a coarse woollen mantle so ragged that Socrates once twitted him with the remark, "I can see your vanity through your cloak."<sup>2</sup> But he was a faithful disciple and stood by his master to the death.

After Socrates' execution Antisthenes gathered about himself a band of disciples of his own. The name Cynic is perhaps derived from the spot where they used to gather, a school called Cynosarges open to the children of Athenians and foreigners, who were technically illegitimate. Or it may come from the Greek word for dog, because of the "dog's life" he imposed upon his followers. Indeed, he discouraged them in every possible way, by personal harshness and brutality as well as by the discipline to which he subjected them. In spite of it all, however, he attracted to himself a large number of adherents.

**Diogenes.** Of these the best known is Diogenes, famed for living in a tub and walking the streets by daylight, lantern in hand, looking for someone worthy to be called a man. He was originally a young counterfeiter who had run away from his native town of Sinope and taken refuge at Athens. His adventures, however, were by no means over. Captured by pirates one day, while crossing to the island of Aegina, he was sold into slavery, bought by a rich Corinthian, and made the tutor of his purchaser's children. He was later freed and took to expounding his views and living the simple life in Corinth,

<sup>2</sup> Diogenes Laertius, IV, i, 4, § 8.

of which he quickly became one of the chief sights and boasts. The story of his meeting with Alexander the Great is well known. Alexander, when visiting Corinth, went to see the old man, whom he found basking in the sun. "Can I do anything for you?" he asked. "Stand a bit out of my light, will you?" was the answer. The king did as he was told, remarking, "If I were not Alexander, I'd like to be Diogenes." Both men died on the same day in 323 B.C.

**Cynic View of Virtue.** First hand information regarding the Cynic tenets is almost entirely lacking. The works of Antisthenes, which were so voluminous that he was called a "universal chatterbox," have all been lost. But from contemporary reports we can gather that his surly and independent character responded to the hardy, self-sufficient, and self-controlled side of Socrates' nature, and that he found in these traits the key to the true nature of the Socratic idea of the good. What was supremely useful, nay, indispensable, to man was just the possession of Socrates' qualities of indifference to external conditions and composure in the face of adverse circumstances. Virtue lay in cultivating serenity and independence of mind, and in thus fortifying the inner life against both the blows and the smiles of fickle fortune. Only by freeing his happiness from dependence upon worldly things and even human ties, could a man render it truly secure and unassailable. But to cultivate these qualities was to possess them. Virtue, then, was not a means to anything beyond itself. It was an end in itself. To be virtuous was to be happy. Thus "virtue for virtue's sake" became the famous watchword of the sect.

**Attack on Socratic and Platonic Universals.** This centering of the moral life and good in the self-sufficiency of the individual was intensified by views drawn from the Sophists' teaching. Antisthenes violently disagreed with Plato's exaltation of the common definitions or "universals" discovered by Socrates into absolute Forms existing in and for themselves, independent of the particular instances that exemplified them. Nor could he accept even the relative importance attributed to them by Socrates. Each individual was unique. Its nature or "form" belonged to it alone and was not shared with anything else. So-called "classes," then, and, for that matter, all standards, institutions, and organizations that implied the real existence of a common tie or interest, were wholly artificial constructions resting on superficial and incidental similarities. "Synthetic" judgments, which tried to knit together subjects and predicates, were logically impossible, since all you were entitled to say of any subject was that it was itself and nothing else. You could not, for instance, say that the apple was

red, for then you put it in a class different from itself. All you could properly say of it was that it was an apple. "Synthetic" behavior, which rested upon an identification of different men's activities in a common cause, was equally absurd. It had no basis or justification in the nature of things, which had created each individual a unique being and a "class" and a law unto himself.

**Attack on Social Conventions and Institutions.** The good life consisted in stripping human existence of everything that was artificial, and in freeing the self-sufficiency of the particular man from external props and supports. The material conditions of human life, and all our political and social forms, conventions, and institutions were unnatural, and dependence upon them was fatal to happiness. Salvation lay in getting back to nature and in reducing our external needs and our satisfactions to an irreducible minimum. Prosperity, wealth, glory, social position and prominence, and all the enormous complications, generally, of what we mistakenly call "civilization" were hindrances, not helps to real well-being.

Marriage, for example, was necessary neither for satisfying duly the wants of sex nor for propagating the species. All forms of government were equally artificial and therefore bad. Nationality and patriotism were false sentiments. A man's true country was the whole world. So, too, the economic order was vicious. Property and money were evils. The popular religion, also, was a trumped-up affair. Its gods, images, temples, and cults were silly and superfluous.

But worst of all was the pleasure man took in all these complications. For that matter the very sensation of pleasure should be suppressed so far as possible, even in connection with elementary and "natural" activities, since in any form it compromised the inner dignity of man. "I had rather go mad than experience pleasure," Antisthenes is reported to have exclaimed.

The practice of these precepts, to which the Cynics applied themselves with missionary zeal, naturally got for Antisthenes and his school a reputation for unconventionality. And their flouting, not only of the amenities, but of what we should call the decencies of life shocked even the tolerant and easy-going ancients. However, the members of the School do not seem to have carried their social and moral anarchy to a point where it seriously conflicted with the established order, and the chief response to their propaganda appears to have been a good-natured derision of their eccentricities.

## III. THE CYRENAICS

**Aristippus and the Pleasure Principle.** Quite different from Antisthenes in most respects was his fellow pupil, Aristippus, the founder of the Cyrenaic School. Born of a rich and influential family of the African city of Cyrene, when that town was at the height of her prosperity in the middle of the fifth century, he was by nature a genial, clever, sweet-tempered youth, a great wit, a "good mixer," and a *bon vivant* addicted to the pursuit of pleasure. It was only to be expected that, when he finally fell in with Socrates and attached himself to the group of disciples, it should be his master's genial, human, pleasure-loving side that attracted him and suggested to him the true nature of the good of which virtue is the knowledge. Moreover, if Xenophon's *Memorabilia* is to be trusted, it looks very much as if Socrates really did justify virtue on the ground that the pleasures it ensured were greater than those procured by vice.

After Socrates' death Aristippus traveled for a while, visiting en route the court of Dionysius I at Syracuse, of whom we shall have more to say when we come to Plato. There is a story to the effect that once the king, whose manners were not his strong point, spat in Aristippus' face, and that the philosopher took the incident calmly with the remark that one must expect to get splashed sometimes when landing a big fish.

Eventually, Aristippus returned to Cyrene, where he started a school of philosophy. Pleasure, he proclaimed, is the real good which all men seek—the good of which virtue is the knowledge and to which it is a means. This fact is obvious. All sentient beings from the moment of their birth strive after pleasure and shun pain. Hence pleasure and pain are the good and evil indicated to all her creatures by nature. Enjoyment is the right end to pursue; the disagreeable is the proper thing to avoid.

**Attack on Socratic and Platonic Universals.** In amplifying his theory, Aristippus, like Antisthenes, was greatly influenced by the Sophists. He, too, felt that the universals by which Socrates and Plato laid such store were surface and chance resemblances, and that each individual was a class and a law unto himself. They were mere names, which failed to indicate any real common nature in the things to which they were applied. Hence Aristippus and Antisthenes together may perhaps claim to be the founders of the "nominalistic" theory of universals in contradistinction to the so-called realism of Plato.

But Aristippus went further than his Cynic confrère. Not only did

the common or class name applied to several objects stand for no common nature resident in them, but it did not necessarily denote a common impression made upon the minds of the onlookers. Take, for example, the word "red," which we use in connection with roses, apples, blood, etc. It does not express a quality of redness in general which exists in all those objects and which at the same time has a nature of its own independent of them. But neither can it imply that these things impress you and me in the same way. Since I cannot get inside of your head, I have no means of knowing whether the word "red" suggests to your mind the same color-sensation it suggests to mine. For all I know your "red" may be quite different. As a matter of fact, if you are color-blind it means to you a sensation I should call grayish green.

So it is with all universals. There is no guarantee that the class-name "man," or "horse," or "table," or "justice," or "temperance" paints the same picture before our respective eyes. "Common" names, then, can no more draw universality from agreement in the minds of percipients, than they can from agreement in natures of the objects perceived. Not only is there no namable, definable, objective world, which can be known, but there can be no comparison of the experiences of different subjects. All that the individual can know is his own sensations, and all he can know of them is how they appear at the moment.

**No Universal Standard of Pleasurableness.** The bearings of all this on Aristippus' theory that pleasure is the good are plain, and he does not hesitate to draw the logical conclusion. Since no comparison of the pleasures experienced by different individuals is possible, any universal agreement as to what pleasures are pleasantest, and therefore best, is out of the question. Again, there is no reason for considering some pleasures "higher" than others. Pleasure is pleasure, from whatever source it may be derived. Moreover, that source is always the body, since even so-called mental pleasures are physical sensations. Finally, pleasure is always experienced at its best and fullest in the present moment. The pleasures of memory and of anticipation are pale in comparison with immediate enjoyment.

*The moral good, then, is to be found in the pleasure of the moment alone.* It "has nothing to do with the recollection of past enjoyments or with the hope of future ones."<sup>3</sup> Hence, in estimating the worth of pleasure, the factor of duration can be ignored. Immediacy and intensity are the only measures of its value. The most immediate and

<sup>3</sup> Athenaeus, XII, 544 (trans. Yonge).

intense pleasures are those of the senses. Therefore they are the best, and are the end at which all moral activity, so far as it is truly moral, is aimed.

**Practical Difficulties of This Theory.** This theory, though, proved impossible of application, as the Cyrenaics soon found. The consequences of a pleasure, and the amount of pains needed to procure it, simply had to be taken into account in estimating its goodness. Some pleasures, however good they might be at the moment, were not worth the suffering that resulted; and some were not worth the bother involved in attaining them. Some pains, too, were better undergone because of the later enjoyment to which they were a means. There was no dodging the factors of duration and consequences in estimating the goodness and badness of pleasure and pain.

As a result the Cyrenaics now found themselves constructing willy-nilly the universal and objective standards of moral conduct the existence of which they had denied. It is true, indeed, that nothing is "naturally and intrinsically just or honorable or disgraceful," but "the good man will do nothing out of the way because of the punishments which are imposed upon, and the discredit which is attached to such actions."<sup>4</sup> Furthermore, the moment that other factors than the mere pleasurable-ness of pleasure enter into the computation of its goodness, the so-called mental pleasures prove to be more satisfactory than those of the senses. They last longer, and they are not so apt to bring satiety or suffering in their train.

**The Comparative Value of Pleasures Determined by Intelligence.** But the theory required still further amendment. It is difficult to compare the pleasurable-ness of one pleasure with that of another, and decide which is better. Again, it is almost as difficult to make up one's mind whether a pleasure is worth the trouble of procuring it or warrants the disagreeable consequences that may follow from it. To deal with these problems and bring them to a happy solution, an outside judge, wisdom or reason, is needed. Intelligence, then, is an indispensable factor in virtue and a necessary means to happiness, just as Socrates said.

On the whole the Cyrenaics ended by giving away most of their original case. They slipped rapidly towards something not unlike the "enlightened self-interest" of the modern utilitarians. But they improved upon Socrates, in that they defined more clearly than he did the end towards which intelligent behavior should be directed.

So, too, their practice belied their preaching. Like the Cynics, they

<sup>4</sup> Diogenes Laertius, II, viii, 10, 97 (trans. Yonge).



taught independence, cosmopolitanism, indifference to external circumstances, cheerfulness, self-control, and an even mind both in success and adversity. But they prized the amenities and refinements of life, which the Cynics despised, and they conformed with good-natured tolerance to the world and society as they found it, where the Cynics were inclined to defiance.

**The Later Cyrenaics.** The School lasted a long time, and the more rational aspects of its teaching were eventually taken over by the Epicureans. Aristippus' successors wobbled in various directions in their efforts to keep the pleasure theory intact. Thus, Theodosius maintained that a man can do exactly what he pleases and be moral, provided only he is clever enough to escape evil consequences. Hegesias, however, came to the pessimistic conclusion that pleasure is so rarely attained as to make life not worth living. And this conclusion he defended so eloquently at Alexandria that he was forbidden to lecture, because he incited some of his pupils to suicide. Finally, Anniceris tried to reinstate the pleasure of the moment as the good. But he believed also in an inborn social nature and innate benevolence in man, which made altruistic action, not a means to pleasure, but an important ingredient in enjoyment and an end in itself.

**Reversion of the Cynics and the Cyrenaics Towards the Sophists.** The Cyrenaics and Cynics taken together demonstrate an important fact which otherwise might be overlooked. They show that in the eyes of some of his pupils Socrates by no means triumphantly refuted the Sophists. He stimulated his disciples' interest in ethics and made them reflect upon the nature of the good. But the fruits of their interest and reflection were in some cases a reversion to the Sophist doctrine and an attempt to answer the question, "What is the good?" in its light, rather than along Socratic lines. Neither Antisthenes nor Aristippus had any use for Socrates' universals, or for standards of right and wrong common to all men lying innate in the human mind waiting to be brought to birth. Their centering of the moral good in the individual, and their doctrine of independence and self-sufficiency, reflected in moral form Protagoras' saying that "man is the measure of all things."

The greatest of Socrates' pupils, however, shared not only his master's interest in ethics but the belief in common and universal moral standards as well. Indeed, in the Socratic general definitions of the virtues, which could be discovered underlying apparently irreconcilable differences of individual opinion, he found the key to the nature of Reality itself. That pupil was Plato.

## *Chapter XI*

# PLATO

### I. PLATO'S LIFE

**Birth and Education.** Plato was born at Athens in 427 B.C., two years after the death of Pericles. On both sides he sprang from the old Athenian aristocracy. Through his father he could claim descent from Codrus, the last king of Athens, and through his mother from Solon, the great lawgiver and author of the first Athenian constitution. His father had been a supporter of Pericles, and his stepfather and his mother's relatives were prominent in contemporary affairs.

Though he grew up during the long years of the Peloponnesian War and the slow collapse of the Athenian Empire, his family escaped the financial ruin that overtook so many of his class, and were in a position to give him the best possible education. Later, he did his military training with the cavalry, and very likely saw active service in the war. The universality of his nature was early apparent. He was a good athlete, and tried his hand at painting, music, writing verses and, it is said, at composing an epic and a tragedy.

His first philosophy was learned from Cratylus, a follower of Heraclitus of the extreme type, who maintained that you could not step into the same river even once, so rapid was the flux, and who refused to speak because words could not convey the meaning of the fleeting instant. Socrates, of whom his uncle Charmides was an intimate friend, must have been familiar to him from early youth, though there is some doubt whether Plato ever became a member of the intimate Socratic circle. As a young man he had no particular flair for philosophy, but thought rather of entering politics, where his high connections and "pull" would have ensured him success. Still, as time went on he was falling more and more under Socrates' influence and becoming more and more attached to him personally.

**Conversion to Philosophy.** It was Socrates' death that turned him once and for all into a philosopher. There could be no further thought of serving a government that had just committed so unforgivable a crime. Then, too, in the flood of his grief and anger his other literary

and artistic interests were submerged. His mission was at length plain to him—to follow in Socrates' footsteps and to vindicate and exalt his memory. Henceforth the whole of Plato's nature was impressed in the service of this ideal, and we may remind ourselves that it is an open question whether for some time he did not write primarily as a chronicler of Socrates' opinions and only later develop his own system.

**Travels and Dialogues.** The anti-Socratic feeling ran so high in Athens that after the execution Plato found it prudent to leave the city. He went first to visit Euclid at Megara in whose house a number of his fellow-disciples also found refuge. For the next ten years he seems to have traveled. To this decade also probably belong the early dialogues, including even a part of the *Republic*. We may note here that the exact order in which the dialogues were composed is a disputed point. The sequence prepared by Campbell and Lutoslawski is perhaps the most authoritative. It places first, in a so-called "Socratic" group, the *Apology*, *Euthyphro*, *Crito*, *Charmides*, *Laches*, *Protagoras*, *Meno*, *Euthydemus*, *Gorgias*, and *Lysis*. There follows a first Platonic series composed of the *Cratylus*, *Symposium*, the *Phaedo*, and the earlier books of the *Republic*. Then comes a "middle Platonic" group comprising the rest of the *Republic*, the *Phaedrus*, and the *Theaetetus* and the *Parmenides*; and finally we have, as late dialogues, the *Sophist*, *Politicus* or *Statesman*, *Philebus*, *Timaeus*, *Critias*, and the *Laws*.

Twelve years or so after Socrates' death we find Plato in Italy. He had gone there apparently to acquaint himself at first hand with Pythagoreanism, with which he had become fascinated either through association with the Pythagoreans from Thebes who had joined the Socratic circle, or it may be through the teaching of Socrates himself. The revolution that had driven the Order from Italy and Greece was long since over, the proscription had been withdrawn, and they had re-established themselves at Tarentum. Especially prominent at the moment was Archytas, the virtual ruler of the city, a man of noble character and universal genius. With him Plato became fast friends.

Another friend that he made at this time was destined to play a prominent part in his life. Dion, the brother-in-law of the reigning tyrant of Syracuse, Dionysius I, became deeply attached to him and procured for him an invitation to visit the Syracusan Court. The visit turned out badly, however, as Plato could not stand his host, who, for all his ability, was a vulgar parvenu of the most objectionable sort. They quarreled, and Dionysius handed Plato over to the Spartan ambassador—Sparta and Athens being then at war—by whom the phi-

losopher was sent off to Aegina and offered for sale in the slave-market. A friend recognized him, bought him, and sent him home.

**Foundation of the Academy.** By this time the Socrates affair was forgotten, and Plato, who was now about forty and comfortably off, could settle down to teach in a congenial atmosphere. He had a house and garden outside the gates on the road to Eleusis, near a playground and athletic field known as Hecadæmus Park. Here he founded his school, known from its location as the *Academy*. New buildings in the shape of a common dining hall and a chapel dedicated to the Muses were added, and eventually his nephew Speusippus and an early pupil of his called Menedemus joined him as a "staff." The method of instruction was the Socratic one of friendly conversation interspersed with question and answer. Problems in mathematics, astronomy, and logic were set the pupils, and formal lectures were also given.

The Academy was primarily a school, not of philosophy, but of political science, and the greater number of Plato's pupils were the sons of ruling or prominent families in the towns of northern Greece, Macedon, and the Propontis and the Black Sea, who had been sent by their parents to Athens to learn the art of government. Among them we may note the Prince Dion, who had followed his beloved Plato to Athens, three young men who were destined for high positions in Arcadia, Elis, and Byzantium, and the Prince of Atarneus, the friend and future uncle-in-law or brother-in-law of Aristotle. Nor should we forget Aristotle himself, who joined the school at the age of eighteen.

**Educational Curriculum.** The venture flourished exceedingly, and the next twenty years of Plato's life were devoted to its development. Unwittingly he was founding the first university in Europe, and thanks to his success Pericles' dream of Athens as the "School of Hellas" was in a fair way to be realized. As the fame of the Academy grew, foreigners no longer came as in the old days to give instruction but to receive it.

Of the curriculum we may perhaps gain some idea from the scheme of education set forth in the *Republic*. During the first years of the School, Plato was putting the finishing touches to his picture of an ideal commonwealth, of whose constitution it was a fundamental article that the rulers should be men of philosophic training and vision, conversant with the immutable principles upon which all real being and all right action rest. As a means to this end, he advocated a thoroughgoing instruction in mathematics, capped by a stiff course in "dialectic." Such, he thought, were the subjects best calculated to instill

the impersonality, the breadth, the soundness, and the justice of outlook indispensable to a man who would govern wisely and well. Specific information in the practical details of the art of government would, he seems to have felt, come of itself through practice and might be left to one side to be picked up along the way. It was the habit of mind inculcated by mathematics and philosophy that was the all-important thing.

Later, Plato became less visionary and more practical. He extolled as the best form of government obtainable under earthly conditions a limited monarchy in which the rule of the sovereign was checked by a constitution and the consent of the governed. This political philosophy he preached to his pupils. And as a matter of fact he turned out so many future law-givers, governors, military leaders, and even would-be despots that he was accused of having founded a school for making tyrants.

**Second Visit to Syracuse.** For twenty years Plato presided in peace and quiet over the growth of the Academy. He finished the *Republic*, wrote the *Theaetetus* and some, at least, of the so-called "critical" dialogues, the *Parmenides*, *Sophist*, *Politicus* (*Statesman*) and *Philebus*. And then the calm was suddenly interrupted. In 367 B.C. his old acquaintance, Dionysius I of Syracuse, died, leaving the throne to his son. The second Dionysius, however, had been so neglected and suppressed by his father that when he acceded he was wholly unprepared for his job. Not unnaturally he turned for advice to his uncle Dion, Plato's friend and pupil, who thus became virtually regent. The young ruler, however, was keen on being educated and learning how to rule for himself. Dion, who had no political ambitions of his own, seconded the project, and proposed that Plato should be invited to Syracuse as the royal tutor. The invitation was sent and was accepted by Plato, who must have seen in it an opportunity to put his theories to the test by training with his own hand a "philosopher-king" of the first magnitude.

For a time the visit went well. Dionysius proved an amenable pupil, and the study of mathematics became the rage at court. But the innovation was not popular with a large party, who did their best to discredit both Plato and Dion in the sovereign's eyes. Their efforts succeeded in making the king so jealous and suspicious of his uncle that he banished him from Sicily. His affection for Plato, however, they could not shake, though Plato himself must have been disgusted with events and eager to get away. Finally a war interfered. The studies had to be abandoned, and Plato was permitted to leave on

condition that he would return when hostilities had ceased. He promised, but insisted that Dion should be allowed to return also.

**Third Visit to Syracuse.** The next five years Plato spent at the Academy. He finished the "critical" dialogues, and perhaps made a beginning with the *Laws*, his last work. But his peace was again interrupted. In Syracuse the war was over, and Dionysius was reminding him of his promise and clamoring for him to come back. But the king would not hear of his uncle's return. In view of this refusal Plato might have flatly declined to stir, had not Dion, eager for a reconciliation with his nephew, urged him to go. Then, too, there were reports that Dionysius was a changed man and had carried on his studies in mathematics by himself during the war. Perhaps there was still hope of turning him into a philosopher-king after all. So Plato went.

But he went only to court more immediate and complete disaster. His efforts to reconcile uncle and nephew only irritated Dionysius into confiscating Dion's property. Plato wanted to go home, but the king would not allow it. They quarreled, and the philosopher was shut up in the palace gardens, virtually a prisoner, for a year. Eventually he was released and allowed to depart, as the result of diplomatic representations made by his old friend Archytas and the Tarentine government.

**Old Age and Death.** Once back in Athens, he settled down again to his teaching and writing. To this period belong apparently the *Timaeus*, the unfinished *Critias*, the *Laws*, and if it be genuine, the *Epinomis*. Life went on the whole peacefully, but he still had one great grief to suffer. Dion, with Plato's consent, enlisted a number of his friends at the Academy in an effort to seize Syracuse and expel Dionysius. The expedition was at first a brilliant success. Dionysius fled to Italy, and Dion was received with acclamation. But his reign was short-lived. He was stabbed by a fellow Academician, one Callippus, who maintained himself in power for a precarious year, and then was overthrown. The whole episode, apart from the personal grief it caused Plato, involved the Academy in scandal and disrepute. Nevertheless, we find him still willing to give sound political advice to the avengers of Dion.

In 347 B.C., Plato died at the age of eighty. Cicero tells us he was hard at work writing, up to the end. And the story is that he died swiftly and easily one day, while at the marriage feast of a friend.

## II. THE PLATONIC TEST OF REALITY

**Reality Not Sense-Experience.** The Platonic philosophy is a child of many fathers. Its paternity, to be sure, is commonly ascribed to Socrates, but other strains enter into its composition, inherited from Pythagoras, Heraclitus, the Eleatics, and the Sophists, to mention only the more dominant. The Heraclitean flux, for example, Plato accepted as an accurate description of the outstanding feature of the sensible world. All particular, concrete objects, of whatsoever kind, come into and pass out of being. Generation after generation of them appear, hesitate a moment between existence and non-existence, and are gone. The first and last state of the sensible world is one, not of *being* anything but of unremitting restlessness, passage, and *becoming*. It fails, therefore, to measure up to the specifications laid down by Parmenides for real being, such as indestructibility, changelessness, homogeneity, and the like—specifications that Plato was inclined, for the moment at any rate, to accept.

Furthermore, its failure is equally conspicuous if we approach the question of its reality by the road of *knowledge*. The sensible world cannot possibly be an object of knowledge, if there is nothing to it but a chaotic flow of dissolving sensations. In that case it will present no *things* to know, nothing that can be named, nothing of which it can be said "*it is*." At the most, we can have of it only individual and shifting *opinions*, and these will not shift rapidly enough to keep up with the swiftness of the change they represent. It would look, then, as if we might as well abandon at the outset any hope of knowledge, science, and philosophy, and turn Protagorean once and for all.

**Structure More Real than Stuff.** Before adopting this counsel of despair, however, let us turn back once more to the flux. Is it really as hopeless as the Sophists thought? If we look more closely we shall see that is not an undifferentiated flow of chaotic qualities in which no patterns can be discerned. Its whole surface is pitted, as it were, with whirlpools, which never shift their positions in the stream and never alter their different sizes and shapes. These whirlpools arrest the onward rush of the flux. They suck its waters in, constrain them to revolve for an instant about a fixed point and to assume a definite form, and then discharge them back into the stream, where they are immediately caught in a new vortex. So thoroughly pitted is the stream that there is not a drop of its content but is revolving about some point of arrest. To leave one whirlpool is to enter another. To

put off an old form is to put on a new. There is no relapse in change, even for an instant, into sheer formlessness.

To put it in Platonic terms, the sensible world of *becoming* is a mixture of the principle of *being*, on the one hand, and of *not-being*, on the other. The two elements are always present in it. *Not-being* makes the object *run*; *being* makes it run true to form. *Being* gives it its outlines, and makes it what it *is*; *not-being* is forever blurring and erasing those outlines, and rubbing out whatever it is that the object may happen to be.

**Immaterial Character of the Real.** The direction in which we must look, if we are to discover the nature of Reality, must now be plain. We must seek and shall find the Real, not in the sensible, tangible, corporeal world-*stuffs* of the earlier philosophers, but in an intelligible world-*structure*. For all stuffs, in spite of their seemingly hard and solid character, have a "being" that is but skin-deep. The only really enduring and "solid" features in the kaleidoscope of change prove, paradoxically enough, to be its most immaterial, non-concrete, incorporeal aspects—the laws it obeys, the forms it exemplifies, the general definitions or ideas that remain constantly applicable to its behavior. These are the things that make the universe what it is, and give it backbone and rigidity. These are the things that endure, that are reliable, that can be leaned upon without their giving way, that are the same yesterday, today and forever. It is, then, not individual bodies, or yet the matter composing them, but rather these bodiless types and natures, lifted clear of space and time and birth and death, and approached not by sense-perception but by the mind's eye, which alone fulfill the specifications of real being.

**Universals, Not Particulars, Are the Realities.** The Socratic teaching, too, led Plato to this conclusion and threw further light upon the nature of the Real. Socrates, we may remember, had sought for common and authoritative definitions underlying the confusion and conflict of individual opinions regarding the nature of the moral good. And he had discovered, as he believed, universal truths in the field of ethics upon which all men could be brought to agree. These definitions could be *known* for certain, and thus raised the mind above sense-impression and opinion and set it upon surer ground. But, unless we accept the theory that attributes to him the teaching of the earlier Platonic dialogues and makes of him a metaphysician as well as a moralist, he never read into them any cosmic and metaphysical significance. Euclid of Megara, however, had, as we have seen, been quick to do so, and had pointed out that the Socratic general idea of



a single self-identical good, expressing itself in different ways in the different virtues, passed all the tests of real existence set up by Parmenides, and therefore constituted the nature of the Real.

Plato was quick to parallel, if not to follow, Euclid's footsteps. That in a thing which gave it character and existence was not its particular but its universal element. The common nature which it shared with others of the same class was the only aspect of it that defied the process of its growth and decay and survived the catastrophe of its death. Specific acts of temperance and courage and justice were over in a moment, swept by the flux into the dead past. But Temperance in itself, Courage in itself, and Justice in itself, or, as Plato calls them, the *Ideas* or *Forms* of temperance, courage and justice, were immutable and deathless essences ever present in the course of history to inspire fresh instances of themselves. They were the true "stuff" of which noble and heroic deeds were formed, just as human nature in general was the real "stuff" of which individual human beings were composed. The universal, then, not the particular and the concrete, constituted the nature of Reality.

### III. THE PLATONIC IDEAS

**Nature of the Ideas.** By these converging avenues of approach, leading from the Pythagoreans, Heraclitus, the Eleatics, and Socrates, we reach at last, the Forms or Ideas—the "unseen" Reality, of which, in Anaxagoras' phrase, "what appears is the vision." Incidentally, we may remark that "Form" is a more accurate description for us of what Plato meant than "Idea." The term "Idea" suggests to us something mental, a concept conceived by and having its existence in a consciousness. But there is no ground in the earlier dialogues for attributing such a notion to Plato, and later we shall find him expressly combating it. Whether he came finally to adopt it, as some critics maintain, is doubtful. The "Idea," apparently for him, was as little dependent upon mind for its existence as it was upon the material world. It had a kind of being all its own which would not be disturbed, were all the intellects entertaining, as well as all the particular objects enacting, it to be destroyed.

Let us listen now to Plato's own description of the Forms. (They are, he tells us, eternal and immutable, present always and everywhere, self-identical, self-existent, absolute, separate, simple, without beginning or end. They are complete, perfect, existent in every respect. They are without taint of sense or imagery, invisible to the eye,

accessible only to the mind.) Furthermore, now that they were transfigured into metaphysical principles, or at least, into logical essences, they escaped, not only the comparatively humble status assigned to them by Socrates, but also the comparatively narrow field of ethics to which he had confined them. Forming as they now did the intelligible structure of the entire universe, their scope had to be correspondingly extended. Wherever two or three data of sense are gathered together under a common name, there a Form is present also. Hence there must be as many Forms as there are possibilities of grouping things under headings and applying to them a common term.

(So it is that besides Ideas of the virtues, we find Plato mentioning Forms of esthetic values like beauty, and of physical qualities such as health and strength, color, shape, and sound, swiftness and slowness. Also, there are Forms of natural objects, and of artificial objects like beds and tables, and of categories and relations such as sameness and difference, equality, greatness and smallness, and even perhaps of evil and negative things.)

**The Ideas a Single System.** (At the same time, these Forms all fit together like the pieces of a picture-puzzle, and present, when properly grasped and arranged by the intellect, a single coherent system, or vision of Reality as a whole.) Just as the place and significance of each separate piece is determined by the picture it helps compose, so the different Forms get the general quality of intelligibility that characterizes them from the total system of which they are a part. (From the Form of the Whole they derive the light which they shed upon the sensible universe.) If they did not all together compose a single rational order, they would make confusion worse confounded by adding to the chaos of sense a further intellectual chaos of isolated laws, and types, and values, which could not be related or even reconciled to one another. They would be like random bits from different puzzles, which could not possibly be fitted together to give a picture of any sort. Therefore, over and above the different Ideas there must be a Form of Forms or essence of general rationality in the universe, from which comes the power of the mind to assemble the Ideas in a consistent, comprehensible picture of the Real.

**The Ideas as Ideals.** Moreover, in the deepest sense of the word, all the Forms remained moral principles and continued to wear the Socratic halo. (From the beginning, the Platonic Ideas were ideals. They were not averages but archetypes or models. They were "typical" only in the sense that the breeder of fancy stock uses the term.) They

possessed all the "points" which the fancier seeks to reproduce.) The Idea of man, for instance, was not a composite photograph but an idealized portrait. It was human nature as it would be if relieved of all shortcomings and disabilities.) The Form of the horse was not any old nag, but thoroughbred. The Idea of the bed had no lumps in its mattress. The true nature of health was not ordinary but perfect physical and mental well-being.

Being ideals, the Forms were objects of adoration. They were not coldly scientific, post-mortem reports of the nature and content of beauty and holiness and truth. They were not a map, but an idealized panorama of the universe, painted with all the colors of the soul's yearning towards perfection. Union with them gave both heart and mind a peace that the sensible world could neither give nor take away, akin to the peace of God.

**Divinity of the Ideas.** (Indeed the Forms, synthesized and organized under the all-inclusive Form of the Whole, perhaps occupied in Plato's philosophy much the same position that a God holds in a theistic system.)<sup>1</sup> (They were the core of Reality. They set the standard and the goal for moral and esthetic aspiration and activity.) And until they were apprehended, the ceaseless struggle of the mind to know the truth could never come to rest. Later we shall find Plato introducing into his scheme a God apart from them, and shall see that he had sound metaphysical reasons for so doing. But even then, they were not to be shaken from their supreme position. (They remained the inspiration of the divine thinking and creative activity as they are of ours.) They were God's ideals as well as man's.) Hence it is not surprising to find him speaking of the completed picture puzzle, or Form of the whole, into which all the other Forms fit, and from which they receive their meaning, as the *Idea of the Good*.

**The Idea of the Good.** Nor is it surprising, since the whole is more than the sum of its parts and has a nature of its own, (to find Plato apparently conceiving the Idea of the Good as a metaphysical principle different from and higher than the other Forms.) Euclid of Megara had already pointed the way in this direction when he identified the Good that in Socrates' eyes unified all the virtues with the pure Being that for Parmenides underlay the seeming existence of particular beings. (The relation of the Idea of the Good to the other

<sup>1</sup> On this point cf. Zeller, *Plato and the Older Academy*, pp. 279 ff.; Adam, *Republic of Plato*, II, pp. 50-51; Nettleship, *Lectures on the Republic of Plato*, pp. 232-233; Burnet, *Greek Philosophy*, Part I, 232; Moré, *Religion of Plato*, pp. 119 ff.

Ideas in the intelligible world, is, Plato tells us, that of the sun in the sensible world to the landscape it illuminates and makes visible.) As the sun enables the eye to see and the physical object to be seen, so the Idea of the Good imparts truth to the known and the power of knowledge to the knower. Again just as the sun is neither the perceiving eye nor the perceived object, but is higher than both, so the Good is neither knowledge nor truth but higher than either of them. Finally, just as visible objects depend upon the sun not only for visibility but for life and growth, so the Ideas depend for their very existence, as well as for intelligibility, upon the Good, which in itself "is not essence, but far beyond essence in dignity and power."<sup>2</sup>

**Modern Dispute over Plato's Concept of the Ideas.** In spite of the piety displayed by Plato towards the Forms and the language he uses in describing them, considerable doubt has arisen lately as to the exact status he ascribed to them. By most philosophers from Aristotle on, this language has been taken at its face value, and the Forms have figured as metaphysical principles, existing in and for themselves apart from the sensible world which enacts them, and possessing, roughly speaking, the incorporeal yet quasi-substantial sort of being commonly attributed by theologians to the Deity.

Certainly, our first impression of them is of models and archetypes, laid up in heaven and imperfectly copied and exemplified by the things of sense. In that case we have what we may call a three-story universe. Beginning at the top, we have the Idea of the Good, from which the light of pure being and intelligibility proceeds. Next we find this light broken into the various Forms, Laws, Types, Values and the like, the presence and apprehension of which in our experience transform it from a chaos of disorderly sensation into an orderly and intelligible world. Finally, we have the world of sensible objects, which is understandable and permanently existent only in so far as it catches and retains the likeness of the Forms.

Of late years, however, this view of Plato's meaning has been challenged by a group of eminent scholars,<sup>3</sup> who regard the Forms, not as *metaphysical principles* existing in and for themselves apart from the sensible world, but as *logical essences* which are enacted nowhere save in the particular objects exemplifying them. For instance, the law of gravitation has a real being of its own apart from physical objects. It exists, but it is not a concrete thing, like the falling apple.

<sup>2</sup> *Rep.*, VI, 527 A-529 D.

<sup>3</sup> Notably Natorp and J. A. Stewart.

Apart, however, from the gravitating objects, it has no *enacted* existence. It might, indeed, be conceived as continuing to exist as a formula, not only if all physical objects, but even if all minds were destroyed. For it was valid, and "held" for the behavior of bodies, long before any minds discovered it. Nor would the disappearance of all bodies annihilate its essence any more than the extinction of all individual dinosaurs and dodos annihilated the types or Forms that these creatures once assumed. Nevertheless, in spite of its independence in one sense of its material embodiments, the Idea gets all its punch and substantial being from the bodies that incorporate and enact it.

Or again, take a value like beauty or moral goodness. It is what it is, whether or not it is ever realized in thought or deed or fact. It points the way, though there are none to follow. It exists, as an ideal, independent of the sensible world. But this does not mean that it realizes itself by some metaphysical method and on some metaphysical level, apart from the sensible order. Apart from that order it is an unrealized value. It can only be met and dealt with in its particular instances.

**The Ideas Perhaps Not Metaphysical Models but Architectural Plans.** If we apply these considerations to the relation of the Platonic Ideas as a whole to the sensible world, we find ourselves not in a three-story but in a one-story universe. The Forms do not constitute a model of the universe, composed of a substance different from the stuff of sense and existing side by side with the material objects; they give the "layout" of the house of life, the sizes and shapes of its rooms and their relations to one another. Take away the bricks and mortar provided by the sensible order, and the plan continues to exist to be sure, but not as another *thing*. It is no longer enacted or incorporated anywhere in heaven or earth. It exists only on the logical plane, as a Form or set of Forms that perhaps some architect might happen upon and embody concretely. Nowhere save in the material, tangible, sensible house has it substantial, enacted existence.

So, too, the Idea of the Good is merely the plan of the universe viewed not in detail but in its entirety. This plan is, to be sure, more than the sum of the plans of the rooms. It is those plans so connected as to show how the whole house is constructed. But it does not need to be drawn on a separate sheet of paper. It is not a second plan. And, like the drawings for the different rooms, the plan of the whole house can be realized only in the material of which the edifice is built.

It is further pointed out that there is really nothing in Plato's praise of the Forms that conflicts with such an interpretation. Laws, types,

standards, and norms, regarded as logical essences and moral and esthetic ideals enacted in the world of sense alone, pass the Eleatic tests of true being as easily as they do when turned into self-enacting metaphysical principles. They are no less true, no less valuable, no less the goals of scientific and moral activity, for being realizable only in the material stuff of the sensible universe.

Whether the "logical essence" view really represents the Platonic teaching is an open question. There is much to be said both for it and against it. But it is so important and has been so ably championed that it cannot be ignored in any description of Plato's doctrine.

#### IV. PLATONIC LOVE

**The Origin and Significance of Love.** Whatever kind of being Plato ascribed to the Forms, every department of experience attested the vital necessity of their existence. Take, for example, the whole affectional side of our nature—the fact that we like and dislike—of which the most intense and characteristic manifestation is our love of our fellow-beings. In one of the earliest dialogues, the *Lysis*, Plato had suggested that friendship cloaks a profound aspiration towards some absolute and final good, which is prized for its own sake. At the famous dinner-party described in the *Symposium* this suggestion is taken up and developed in a series of speeches about the nature and the meaning of love. Love, we are told, is a glorious thing, inspiring deeds of self-sacrifice in beloved and lover alike. It must, however, be divided into two sorts, a sacred and a profane love, the one occupied with the body of the beloved, the other with his mind and character. Only through the higher love can true happiness be found. The sense of completion of one's own self in union with the beloved—and here Plato puts a half-serious, half-jesting explanation into the mouth of the poet Aristophanes, who figures as a guest at the dinner—comes from the fact that in the beginning each human being was double, with two faces, four arms and four legs. In some of these creatures the halves were of the same sex, in others male and female were joined together. Zeus, fearing their strength and agility, cut them in two and rearranged each half in our present human form. The severed halves go about seeking for each other, and, when they have found them and united with them, feel "rounded out" and completed again. Thus the love of man for woman and of members of the same sex for one another and the satisfaction that comes from consummating it are explained.

shown that the maximum of enjoyment in the long run was to be had from continually itching and scratching, such a good would be repugnant to human nature. To determine what pleasures are really preferable we must appeal to something beyond their pleasurable-ness, and this something Plato finds in wisdom or reason.

Later, in the ninth book of the *Republic*, he returns to the charge, this time to show that pleasures are deceptive, that mere cessation of pain or anticipation of enjoyment are often mistaken for them, and that intelligence is needed to distinguish not only what pleasures are preferable, but what are really pleasures. To make this distinction the sources of enjoyment must be taken into account, since the enjoyments derived from the less real and permanent parts of our nature, such as the body, will have less reality than those connected with the soul whose delight is in contemplating the changeless and the eternal. Finally, in the *Philebus*, Plato, provoked perhaps by an advocacy of the pleasure theory by some of his own pupils, sums up the whole matter. Pleasure and intelligence are both indispensable ingredients in the good life. To make pleasure alone the criterion of the good, as the Cyrenaics were fain to do, would reduce human life to the level of the oyster's existence. On the other hand, an austere life of pure thought, such as the Cynics advocated, from which all pleasure was banished as evil, would not be worth living. Still, reason must be the dominant factor and the final judge both of the quality and quantity of pleasure necessary to a well-balanced moral diet.

The recurrence at intervals of these attacks upon different aspects of the pleasure theory shows, perhaps, that hedonism remained a burning issue during Plato's lifetime, and that while constructing his own system he had constantly to ward off repeated assaults from his adversaries.

**Virtue One Not Many, Innate Not Acquired.** But there was other preliminary work to do, in the way of clearing the ground. In the *Protagoras* Plato also refutes the Sophists' teaching that the several virtues have no unified principle of goodness underlying them. This he does by showing that all the virtues, however different they may seem, have a common opposite, *ignorance*, and therefore imply in their various ways a *knowledge* of what is best for man. Furthermore, this knowledge cannot be taught in the Sophists' use of the word "teaching," as an instilling into the mind from without of a set of artificial precepts which take no real root there. But it can be taught, if by "teaching" we mean a revelation to the soul from within of principles grounded in her essential nature. That the mind possesses such innate

principles or ideas he demonstrates in the *Meno* by showing that even an untutored mind, totally ignorant of geometry, will recognize instinctively the truth of the Pythagorean proposition. Mathematical knowledge is, then, latent in the mind from the beginning and needs only to be awakened. In the same way, ideas of right and wrong are innate.

**The Nature of Right and of Morality.** Thus, at the very outset, Plato established the existence of moral standards of some sort, which drew their authority not from the pleasure of the moment, or even from pleasure in the long run, but rather from the use of intelligence directed towards some broader end. There were, however, still foes to be dealt with. There were, for instance, the politician Callicles, and the Sophist Thrasymachus whose political inferences from the teaching of the Sophists we mentioned in a former chapter. Callicles, we may remember, advocated the extravagant view that conventional morality is entirely artificial and at variance with natural morality which supports the right of the stronger to rule the weaker as they choose. To this Plato replies that the possession of power in itself is no advantage; nay, that power in the hands of a fool is only an instrument of self-destruction. The strong must also be wise and just if they are to be really strong. The pursuit of pleasure and self-aggrandizement on their part not only corrupts them but leads to their downfall. The truly strong exhibit their strength by showing themselves able to improve mankind. Indeed, it is *better* to suffer injustice than to commit it, and those who perpetrate it would do well to seek out the judge and ask for remedial punishment at his hands, just as the sick man goes to the doctor and asks to be made well again, even by an unpleasant cure.

Much the same argument is advanced in the first book of the *Republic* against the contention of Thrasymachus that there is not even a natural right, and that so-called morality is merely the interest of the party in power at the moment. That party may mistake its own interests, in which case its edicts can be obeyed only to its own disadvantage. Its real advantage, like that of the doctor or the shepherd, is identical with the well-being of those over whom it rules. The physician or the herdsman, so far as he is skillful and a true doctor or shepherd, is primarily concerned with his patients or his flock. He loves and takes pride in his work for its own sake. That it also pays him is secondary. Pay is an extra reward bestowed upon him by society for work well done. Nor does the successful practitioner of any art try to circumvent its restrictions, as the man seeking only his own



advantage tries to get around the restrictions laid upon him by the art of government. Moreover, when each pursues only his own private interest, there is strife, which makes for weakness, not for strength. All in all, selfishness impedes the proper functioning of human nature and stands in the way of happiness instead of furthering it.

**The Nature of Goodness.** Still, the suspicion will not down that morality is really artificial and a matter of expediency pure and simple. Are not men naturally inclined to pursue their private ends and to war upon one another, and are they not merely constrained to deal justly with their neighbors from fear of retaliation, human or divine, or because they consider honesty the best policy? It is in reply to this question that Plato abandons his tactics of telling us what the good is not, and undertakes a positive description of the nature of righteousness, or as he calls it, of "justice."

Such an undertaking, he says, may best be conducted in capital letters, that is, in describing the ideal State, in order that we may the more readily recognize righteousness when we find it writ small in the individual. So our search is raised to the political level and becomes an inquiry into the constitution of the perfect commonwealth. Any State, he continues, that has developed beyond the primitive, Arcadian stage, will require a *working class* given to many, varied occupations, an *army* to defend it against its foes and to ensure its growth, and a *governing class* to administer it. At the same time, no State can be perfect if it is too large or too rich. Hence its size and wealth must be strictly limited. But too great poverty must also be avoided, since it breeds discontent and inefficiency. }

**Equality of Men and Women.** The all-important thing, however, is the breeding and training of the class entrusted with government, for, if it be wise and good, the well-being of the State as a whole will follow as a matter of course. In outlining the ideal method of reproduction and education, Plato makes three startling proposals. In the first place women should receive the same training as men, so far as their weaker and somewhat less intelligent nature permits. They should even undergo military training. Here Plato seems to be influenced by the movement for the emancipation of women already afoot in Athens, as well as by the example of Sparta where women already shared to a large extent the life of the men. ☉

✓ **Abolition of the Family and of Private Property.** Secondly, individual marriage should be abolished and all the women and children should be held in common. The governing class should be bred eugenically like prize stock among the other animals. Only men be-

tween twenty-five and fifty-five should be allowed to beget, only women between twenty and forty to bear. Union should be by lot, but the dice should be so loaded that the best and bravest men pair with the strongest and fairest woman. Inferior children should be put out of the way at birth. The others should be at once separated from their mothers and brought up by the State in a kind of government nursery, ignorant of the identity of their parents. Only in this way can the opposition to the common good of the private interest created by the family be abolished. Inbreeding, however, will be supplemented by recruiting from the ranks the abler children of the lower classes. And the less brilliant offspring of the governors will be allowed to sink to their proper levels. The ownership of private property by the governing class must also be strictly forbidden, since it, too, is a distracting influence.

③ **The Philosophers as Governors.** The greatest innovation in Plato's eyes is, however, that the rulers must be philosophers. "Until philosophers are kings, or the kings and princes of this world have the spirit and power of philosophy, and political greatness and wisdom meet in one . . . cities will never rest from their evils . . . and then only will this our State have a possibility of life and behold the light of day."<sup>5</sup> It matters not that philosophers have the reputation of being impractical and unbusinesslike. They alone are the spectators of all time and existence, and are able to see through the superficialities and shams of the world of appearance to the truth of things. Under actual conditions, where the art of government consists in humoring the whims and blind prejudices of that great beast, the people, and in dodging its furies, the philosopher, naturally, seems to be either a knave or a fool. He is like an expert navigator on a ship, who finds himself at the mercy of a stupid captain and an ignorant crew, each one of whom thinks himself capable of steering the vessel and therefore berates the trained pilot as a mere star-gazer. No wonder that in these circumstances the true philosopher prefers to shelter himself in obscurity from the insults of the crowd, and to "live his own life and be pure from evil and unrighteousness, and depart in peace and good will."<sup>6</sup> Still, although his nature, being finer, is perhaps subject to deeper corruption than more ordinary characters, and although there are many second-rate imitators of his wisdom, to him and to him alone the guidance of the State must be entrusted, if the ideal commonwealth is to be realized.

<sup>5</sup> *Rep.*, V, 473 C-D.

<sup>6</sup> *Ibid.*, VI, 496 D.

**Education of the Governing Class.** The education of such a man must necessarily be long, painstaking, and subject to every edifying influence. It will begin, naturally, with "music," or the general cultural training in poetry and in playing upon some musical instrument, to which all the Athenian youth of Plato's time were subjected. But "music" as it stood must be thoroughly expurgated before it could be made a suitable element in the discipline of a philosopher-king. In suggesting the necessary changes, Plato involved himself in a remarkable theory of the relation of art to morality.

Homer and Hesiod, who heretofore had been the backbone of Greek cultural and religious training, must, he tells us, be banned, since they frequently portray the gods as immoral, death as fearful, and the apportionment of reward to merit as non-existent. These are ideas from which youth should be carefully shielded. The budding philosopher-king, especially, must hear and believe nothing that is not morally edifying and a model of virtuous thought. Nor can the run of dramatic poetry be permitted. Dramatic poetry is imitative, and unworthy situations and sayings are attributed directly to the characters in the plays. If imitation is to be allowed at all, it must always be of the good. Even the epic poet must never speak of vice in terms of which a strict moralist would not approve.

So, too, with singing and playing. The sentimental Lydian harmonies and the soft Ionian melodies used as accompaniments for drinking songs must be forbidden. The sterner Dorian and Phrygian modes which reflect the high seriousness of life are the only ones to pass the censor. New-fangled, many-stringed, curiously harmonized instruments, and strange, complicated scales have no place in the heavenly choir. The flute, particularly, is very demoralizing. Only the old-fashioned lyre, the harp, and the shepherd's pipe are ethical. Rhythm, too, must be carefully scrutinized and rigorously cleansed of anything that might excite an unworthy mood. The other arts, weaving, embroidery, painting, sculpture, and architecture, must be purified in like manner. Extreme severity and simplicity must be the order of their day, and in their works they must not aim at anything but moral edification.

In the tenth book, Plato renews his crusade. All art is intrinsically poor stuff. It imitates the sensible world, which in its turn is but an imitation of the Ideas. Its productions are a third step away from reality, and belong to the world of illusion. Poets and painters know less about true being than do practical men of affairs who, by making and using the objects the artist only depicts, learn more about their

real natures. Imitative art is an inferior who marries an inferior and has inferior offspring. Poetry is particularly low-born. Once more, Homer must be politely invited to leave the ideal State, where hymns to the gods and praises of famous men are the only poetry that is permissible.

**Gymnastics, Military Service, and Mathematics.** The foundations of a strong mind laid by "music" must be reinforced by a strong and healthy body which "gymnastics" will build up by exercise, diet, hygiene, and the like. The two disciplines reinforce and counterbalance each other, since "music" without gymnastics breeds softness and effeminacy, and gymnastics unrefined by music favors harshness and savagery and turns out a race of boors. These two studies, it would seem, are prescribed for the youth of the entire community. The recruiting and education of the governing class begins with the selection of the strongest and most intelligent individuals, apparently both from the children of the lower classes and from those of the governors, for military service. From the professional army of auxiliaries or warriors thus mobilized, the most patriotic, intelligent, and morally courageous will be sifted out and submitted to the special curriculum calculated to make philosopher-kings of them. The studies prescribed to this end are first arithmetic, which makes for clearness of thought, and is also indispensable to the military art. Then will come plane geometry, which besides its practical uses impels the mind to recognize the difference between the perishable, sensible order and the world of eternal truth. The focusing of the attention upon changeless and imperishable realities is furthered by the study of solid geometry, which in Plato's time was in its infancy, and of astronomy which investigates the eternal laws governing the movements of the heavenly bodies and presents to the mind universal and immaterial natures like absolute swiftness and slowness. To this must be added harmonics, or the science dealing with the absolute relations of harmonious sounds.

**Dialectics.** By the time the pupil is thirty, the course of preliminary studies should be completed, and the next five years must be devoted to dialectic, or philosophy. Great care, however, must be taken to prevent dialectic from degenerating into mere arguing for the sake of argument. At the end of the period, the chosen few will be put to a fifteen-year test of practical life and of governing the State in accordance with the principles of real being with which they have been inculcated. Finally, when they are fifty, those who have passed the test will be released from their duties and allowed to retire to a life of

contemplation, though even then they will be required at intervals to return to the world for brief periods and to assume again the responsibilities of government.

**Nature of Political Justice.** Having thus completed his picture of the ideal State, Plato is ready to apply its lessons to the discovery of the nature of justice, or righteousness in general. Obviously each of the three classes in the commonwealth has its particular function, in the proper performance of which its excellence or virtue consists. The function and virtue of the *governing class* lie in the possession and exercise of *wisdom*; of the *military class*, in *courageous behavior* inspired by a knowledge of the things that are truly to be feared; and of the *masses*, in a recognition of the superior ability of the wise to rule and in *obedience* to their behests. This last virtue may be called self-control or temperance. When each part of the State is displaying its proper excellence, and is not trespassing upon the functions of the others, the *commonwealth as a whole* is in excellent shape. Its general virtue is *harmony and balance*.

Here at last, then, we have the nature of political justice or righteousness. It is constituted by each class sticking to its own job, minding its own business, doing what it is fitted to do, and not meddling with the business or aspiring to take on the job of the others. So, too, in the good State every individual, whatever his class, will also mind his own particular business, cultivate his proper talents, and not try to do things for which he is not suited.

**The Righteous Individual.** The righteous individual character is only political justice writ small. Like the State, each man is divided into three parts. He has a governing part, *intelligence*, which corresponds to the ruling class in the State, and whose distinctive virtue also is wisdom; and he has *passions and appetites* connected with the economy of bodily life, which correspond to the economic classes in the body politic. This element shows itself virtuous in so far as it exhibits temperance by submitting to the control of intelligence and wisdom. Again, the individual has a *spirited or willful faculty* in him which can be either stamped by the desires or harnessed in the service of reason. This element corresponds to the warriors in the State and, like them, displays its specific excellence of courage when it is guided by reason rather than by passion in its estimate of what things are truly to be feared. Finally, in the individual as in the commonwealth, justice, or righteousness, will lie in a harmonious co-operation of all faculties and functions in which each tends its own job, minds its own business, and refrains from encroaching upon the others.

In the righteous man reason rules, the desires and passions obey, and will or "spirit" is guided by intelligence, not misguided by impulse.

**Inferior Types of the State and the Individual.** The nature of righteousness is further illustrated by the picture, drawn by Plato in the eighth book of the *Republic*, of the progressive deterioration of the State and the individual from the ideal of perfect justice. The first stage in the lapse from *aristocracy*, or the unfettered rule of the whole by the best part of both the commonwealth and the particular citizen, is called *timocracy*. Politically this means the passing of government from the hands of the philosopher-kings to men of rougher caliber, disciplined and respectful of authority, to be sure, but *covetous of worldly power and distinction instead of wisdom*. Individually, it means a similar shift in the private interest from *governance by reason* to *the sway of worldly ambitions*. Indeed, intelligence, which should rule, now becomes the mere servant of the will to power and glory. Interest, however, does not remain long at this level. It is soon diverted from prowess and fame to the more vulgar end of wealth. The direction of the State falls into the hands of the rich, and the individual citizen, intent now only on making money, becomes avaricious instead of ambitious. In this way we sink to the level of *plutocracy* and *the miser*.

In the State this condition opens a gulf between the rich and the poor, breeds discontent, and leads to a revolution which brings the *masses* into power and sets up *democratic rule*. Democracy, however, is worse than plutocracy, since it lacks any unifying and restraining force whatsoever, such as even the rule of the rich imposed, and abandons the direction of the commonwealth to a "free" play of random and conflicting impulses, in which the crowd is swayed blindly hither and thither by the whim of the moment. Respect for superior wisdom and ability has disappeared, authority of any sort is flouted, and everyone does what he pleases regardless of whatever may happen to be the law. In the individual, a similar deterioration takes place. The restraining ideal of *avarice* gives way to an *unbridled self-indulgence* in which the appetites let themselves loose in a free-for-all, rough-and-tumble scrimmage. All cohesion and unity is lost from his life, which, instead of being a career of some, if even of the meanest, sort, is plunged into moral chaos.

Finally, in the State a single person takes advantage of the situation, seizes the power, and makes himself *tyrant* over the rest. And in the individual some one besetting passion, generally lust, becomes a mania and obsesses his entire nature. Freed from even the check imposed

on the "democratic" person by the variety and the conflict of his many wants, he speedily turns criminal and is swept away to ruin. Than *tyranny* as a political institution, and the tyranny of some single passion in the individual soul, nothing could be worse—except the combination of the two in the person of a criminally inclined despot.

**The Moral Life and the Absolute Good.** In this description of the nature of political and individual righteousness, and of the progressive lapses from it, we can see that Plato is preaching his doctrine of the Forms. He is asserting that there is an absolute and universal moral law and order, which is not dependent upon human opinion or caprice, but is part and parcel of the constitution of the Real. We may never be able to enact on earth either the perfect commonwealth or the perfect human being. But they are nevertheless laid up from all eternity in heaven, as patterns and standards, increasing conformity with which means the progressive approach of both the State and the individual towards their *real* natures. If these ideals had no *real* existence they could have no *real* authority, and the Sophists would be right. Socrates was short-sighted in not perceiving that even the common consent of mankind was not sufficient to give validity to his universal definitions. Common consent made of them only universal *opinions* which, after all, might change with time. To become universal *truths*, their foundations had to be sunk beneath the unstable ground of human experience, and set upon the changeless bedrock of Reality.

The metaphysical implications of a political and moral order are more explicitly set forth in a later dialogue, the *Philebus*, to which we have already had occasion to refer. There, we may remember, Plato tried to settle the dispute between the Cynic and the Cyrenaic theories of the good by determining the proportions in which wisdom and pleasure should be mixed in the righteous life. This mixture, he now tells us, must be determined by the ideal of symmetry and measure, or, in other words, of harmony. But the attainment in human experience of the symmetry and measure necessary to make it good, depends upon the existence of an absolute formula which prescribes with mathematical rigidity the relations that the ingredients of the good life must bear to one another. Unless an eternal Form or Idea of symmetry exists, it cannot be applied to the moral problem, and there will be no way of knowing just which proportion is really best. In short, unless there is such a thing as absolute righteousness and a universally valid Form of social organization, equally authoritative in all times and places, moral standards will be matters of opinion, and ethics and politics can never be exact sciences.

## VI. THE PLATONIC THEORY OF KNOWLEDGE

Since a sound morality rests upon true knowledge of the good, and not upon mere opinions about its nature, we are led to ask how the two differ and how true knowledge is acquired. There are, Plato tells us, four stages in the passage from blank ignorance to comprehension of the truth, two of which belong to the realm of opinion, two to that of knowledge. The two that fall within the sphere of opinion, are (1) *vain imagining* and *wild guessing* and (2) *assurance* or *confidence*.

**Opinion.** 1. In the first stage the mind scarcely distinguishes fact from fancy, dreaming from waking, the shadow from the substance, the reflection from the original. It reacts at random to sensations as they come.

2. The more tutored mind, however, learns to distinguish these things from one another, and to distinguish the so-called real and reliable aspects of sense-experience from the deceptive and "imaginary" ones. Inspired by observation, it passes from hit-and-miss guesswork in dealing with the world to rough-and-ready rules of thumb and predictions that prove trustworthy. But, though these are sufficient for carrying on everyday life, and, indeed, are the guides which most people are content to follow, they are empirical rules, drawn roughly from scattered, particular events and objects and accepted on faith. We do not as yet *understand* why or how the substance differs from the shadow, waking from dreaming, the real from the imaginary. Nor do we know the *reasons* for the trustworthiness of the rules of thumb we follow.

So far, then, we have not begun to think. We have merely noted certain regularities and recurrences in the flux of sensible events and developed a blind trust in them. We have come to have *opinions* about things, but we as yet have no foundation for them.

**Knowledge.** We pass now to the third and fourth stages, which belong to the realm of knowledge. These are (3) *thinking through* and *understanding*, and (4) *dialectic* or *philosophic wisdom*.

3. We enter upon the third stage when we begin to back up our views by *thinking through* situations and seeking *reasons* for our opinions about them. We are thus led to the discovery of general principles and universal laws in the flux of events, and come, as we say, to *understand why* things occur as they do and what they really are. Our opinions now have foundation, and our predictions can now



be made with certainty. For we have now crossed the line that divides mere *opinion* from *true knowledge*.

In so doing, we have, moreover, entered another realm of existence. We have passed from the multiple, moving world of particular concrete objects to an immutable, eternal order of universal Types and Laws and Values, which the flux of sense-experience invariably displays in all times and places and throughout all its changes. These Forms and formulae are, however, not perceived by the senses. They are apprehended and entertained by the intellect, whose function it is to grasp the general pattern and plan that particular objects enact in a sensible medium.

**Knowledge and Absolute Truth.** Now, if these Forms have no real existence, or, in other words, if the universe has no definite, intelligible constitution but is wholly formless and lawless and nothing but an unordered flux of sense-data, then so-called understanding and knowledge are from start to finish an abortive and meaningless pursuit of something that does not exist. Hence, if there is to be anything to knowledge, and we are ever to get beyond the stage of unfounded and unverifiable opinions in dealing with the world, the immutable Types and Laws which knowledge is forever seeking, and the discovery of which alone can satisfy the mind—in other words, the Platonic Ideas—must have a real existence of their own.

4. We come at last to the final stage in the acquisition of knowledge. *Thinking through* the world of sense to the world of eternal Forms and laws exemplified in the flux, does not bring our mental activities to their final goal. Before we can be really said to *know*, we must bind into a single, organized *whole* the different Forms and laws discovered by thinking through and understanding phenomena. Only in such a unified vision of Reality can the aspiration toward knowledge and truth come to rest. Furthermore, we must also rid ourselves of the imagery, as, for instance, the visible diagrams and written equations, upon which scientific explanation and demonstration lean. Knowledge must dispense with such aids, abstain from pictures and metaphors altogether, and rely solely upon pure reasoning, before it can rid itself of every type of uncertainty and be absolute. This final stage, in which the mind passes from the Forms discovered by the sciences “to the first principle of the whole; and then clinging to this, and to that which depends upon this, by successive steps . . . descends again without the aid of any sensible object, from ideas, through ideas, and ends in ideas,”<sup>7</sup> is *dialectic* or *philosophy*.

<sup>7</sup> *Rep.*, VI, 511 B.

**The Divided Line.** These four stages, Plato says, may be illustrated by dividing a line into two and then subdividing the resulting sections, making four in all. The first act of division separates the sensible from the intelligible world and opinion from knowledge. The furthest subdivision of the sensible section stands for our perceptions and the imaginings and guessings to which they give rise, the nearer for the external world of sensible objects of which our perceptions are copies, and for the confidence they engender. Crossing the line to the intelligible world, we come first to the separate Ideas, and to scientific understanding of them, and finally to the unified system of the Ideas, expressed in the single all-embracing and all-explaining Idea of the whole embraced by philosophy.

**The Prisoners in the Cave.** Or again, we may think of mankind as prisoners in an underground cave (the sensible world), doomed to watch by firelight the flickering shadows (sensible data) cast by figures (physical objects) behind them copied from objects (The Ideas) existing in the sunlight above, on the surface of the earth (the intelligible world). What the prisoners see and take for truth is really nothing but the shadow of an image. Turn them round, and, dazzled by the firelight, they will have hard work to see the figures in the first place, and then to believe that the figures are more real than the shadows to which they have been accustomed. Take them up into the sunlight and they will be even more dazzled and blinded. It will take them a long time, and will require a gradual habituation of the eye to the new light, before they can distinguish the objects of which the figures are the copies—or in other words, the Ideas—and still longer before they can bear to look with a philosophically trained eye upon the Idea of the Good, of which the sun in the sensible world may be regarded as the visible counterpart. ✓

Indeed, Plato feels, the attainment of this final vision of the truth, the whole truth, and nothing but the truth, can scarcely be realized by the mind while it is still imprisoned in the body. In any case, it involves a complete "conversion" of the whole mind from the sensible to the intelligible realm, and, like the experience of the soul yielding herself to the embrace of absolute beauty, can only be described in mystical terms. Knowledge, like love, is consummated in an ineffable ecstasy. But even so, knowledge like love has meaning only if its object—the universal and the absolute—has real being.

**Knowledge or Reminiscence.** At this point, however, we are confronted with a difficulty. After all, here and now, the mind is in the body, and is dependent upon the senses, it would seem, for its contact

with external reality. But the senses never acquaint us with the universal and the absolute. They present the mind only with particular, concrete data. We do not *perceive* redness, or mankind in general, or the law of gravitation. We perceive this or that individual man, this or that particular object. How then can the mind ever come by general ideas and universal truths at all? It cannot get them from the senses, and yet, apparently, there is no other source save the senses for any experience whatsoever.

This difficulty Plato meets with his famous doctrine of Reminiscence or Recollection. In the *Phaedrus*, to which we have already referred in discussing the nature of love, we are told that before birth the soul, living in heaven with the gods, saw the Ideas face to face. Fallen from heaven and born in the body, she retains a faint recollection of the Forms she has seen, and is *reminded* of them by their sensible embodiments with which the senses acquaint her. It is by virtue of being thus "reminded" that the soul is able to find similarity in sensible objects, to single out in them features they have in common, to classify them according to their "type," and to give them group names. In the *Meno* also, we may remember, the untutored slave-boy's ability to recognize the truths of mathematics was attributed to his converseance with them before birth. Generally speaking, then, the growth of knowledge is simply clearer and clearer recollection of the Form of which the particular sensible object "reminds" us.

**Particular Objects and Universal Ideas.** There was, however, another difficulty not so intimately connected with knowledge, but still quite closely related. We recognized the Form in the sensible particular because of our previous acquaintance with it, but how did the Form get into the particular object? What was the relation between the universal Idea or type and its individual instances, between the abstract nature of redness and particular splotches of red, between human nature in general and individual men? Plato might seem to have so completely severed the Form and the concrete things exemplifying it that there was no hope of getting them together again. Indeed, he was accused by Aristotle of having done so. He seems to have felt the difficulty and to have tried to deal with it, for we find him now suggesting that particular objects are *copies* of their archetypes, and again that they somehow *participate* or *share* in the universals of which they are instances. But neither of these suggestions patched up the difference, as Aristotle was soon to point out. Not only did they leave the Idea and the particular as disconnected as ever, but the relationship of copying or participating raised fresh perplexi-

ties. Some modern apologists, particularly advocates of the "one-story theory," have tried to make the notion or metaphor of participation plausible. But others feel that here we have a real and enduring weakness in the Platonic system, which was never satisfactorily overcome. We shall find Plato again struggling with this problem in a later dialogue.

#### VII. PLATO'S THEORY OF IMMORTALITY

**Reasons for Believing the Soul Survives Death.** As we have just seen, the possibility of recognizing the Form in the particular object and of recapturing it in the process of knowledge is bound up with the pre-existence, and by implication with the immortality, of the soul. In the *Phaedo*, Socrates' conversation with his disciples in the hours preceding his execution is devoted to proving that the soul survives death. The interdependence of opposites and their generation out of one another are invoked to show that as life turns to death, so death must return to life once more. So, too, death means decomposition, and therefore cannot touch a simple and unalterable and therefore indissoluble entity. The soul is such an entity, since her natural affinity is not with the changing sensible world but with the changeless and eternal objects of thought. Nor can the soul be a harmony of the body, as the Pythagoreans taught, and hence dependent upon the body as music is upon the lyre. On the contrary, she directs and sometimes opposes the body, and is therefore independent of it. And since she is invariable in nature, there is no reason to fear that, after wearing out several bodies and passing through a number of reincarnations, she may eventually herself run down and stop. Finally, the essential nature of the soul is to live. That is, she participates in the Idea or principle of life. But this Idea logically excludes its opposite, which is death. Therefore, she can never be dead, any more than what participates in the nature of the odd can ever be even, or of the hot, cold.

Again, in the *Phaedrus*, it is pointed out that the soul, being self-moving, cannot be started or stopped by anything outside herself. Hence she must also be without beginning and immortal.

**Doctrine of Reincarnation.** These arguments are supplemented in the *Phaedo*, the *Gorgias*, and the *Republic*, by vivid pictures of the after-life, drawn from Orphic and Pythagorean sources. After death the soul preserves for a time her personality and is punished or rewarded for her evil or good deeds on earth. But this retention of personality lasts for only a thousand years. At the end of each thousand-year period there comes what we should call a real death, involving a

complete extinction of personality, so far, at least, as continuity of memory is concerned. All the souls are assembled and are told to choose the lives they are to live in their new reincarnation. Their choice is proclaimed to be free, that theirs may be the responsibility and that God may not be blamed. But it is determined as a matter of fact by the preferences developed in them by their past existences. The souls of animals are also free to choose, and some animals select human, and some men animal, lives. Having chosen, the soul passes through the waters of Lethe, forgets her past, and enters upon her new incarnation with a clean slate, except for one thing. All personal ties with her past existences have been obliterated. She is a new person, with no inkling of the other lives, animal and human, she has lived. But her disposition for good and evil, and her moral fortunes for better or for worse in her new career, are a heritage from her behavior in her former lives. This and this alone, except for the equally impersonal reminiscence of the Forms, links the individual with a pre-natal past and a post-mortem future.

**Reunion with the Divine.** But there is more to Platonic immortality than an endless repetition of death and rebirth. For Plato the proper destiny of the soul is to regain her birthright of reunion with the eternal to which she is akin, and from which somehow she has become separated. This destiny she may fulfill by repeatedly renouncing the world of sense and taking refuge in the intelligible and the timeless, until she has at length sufficiently purified herself from the dross of earth. Then, when the moment of her release arrives, she escapes from the revolving wheel of reincarnation, passes out of time altogether, ceases to be everlasting, and becomes one with the eternal. With this mystical, timeless, super-personal immortality as Plato conceives it, his discussion of love in the *Symposium* has already made us familiar.

## Chapter XII

# PLATO (CONTINUED)

### I. FURTHER PROBLEMS

**Critical Character of the Later Dialogues.** We have now reviewed the teaching set forth in the dialogues that are regarded by some critics as a description by Plato of Socrates' teaching rather than as an exposition of his own views. In the dialogues to which we are about to turn we have certainly Plato's own philosophy. We shall see in them, if we regard the earlier work also as essentially Platonic rather than Socratic, an amplification and revision of his position. Otherwise, we shall think of Plato as now launching upon his own system, which develops and corrects in a more critical spirit the ideas of Socrates. In either case, we shall find in the dialogues we are about to discuss both a further and more critical treatment of questions already raised in the earlier dialogues and an exploration of new problems, as yet scarcely touched upon. This later work seems also to have been provoked in part by objections raised by his opponents. We must remind ourselves that Plato did not do his thinking in an intellectual vacuum, but in an atmosphere of excited and bitter philosophic controversy, in which his views were under constant attack.

The chief problems raised in the later dialogues are as follows: (1) the relation of the Forms to the concrete objects that enact them and to the minds that entertain them; (2) the difference between truth and error; (3) the nature and place in the universe of Soul and of God; (4) the mathematical aspect of the Forms; (5) the generation of the universe; (6) the nature of the world-stuff; (7) the imperfection of the universe; and (8) final reflections upon politics. Let us take up these points one by one.

### II. THE RELATION OF THE IDEAS TO CONCRETE OBJECTS

**Criticism of Participation.** In the *Parmenides* Plato tackles the difficulties he now finds in the first of the problems just mentioned. After noting that there ought by rights to be ideal archetypes of ugly and

evil particular objects, as well as of good and beautiful ones, he goes on to criticize his earlier suggestion that the relation of sensible objects to the Forms they exemplify may be described as one of *participating* in the Idea, or of *resembling* and being a *copy* of it. Neither of these ways of expressing the relation, he now tells us, will work.

The trouble with *participation*, he continues, is this. Either one and the same Form must be present at one and the same time in many particular objects—which is absurd; or else the many particular objects possessing one and the same Form only possess a part of it, and are therefore only partly what they are—which is equally absurd. How, for example, can you and I both be in exclusive possession of the whole nature or Idea of Man? On the other hand, how, if we are both human beings, can we fail, either one of us, wholly to possess the human Form in its entirety? If that Form is shared between us, and either one of us possesses only a portion of it, then neither you nor I is *completely* human.

**Criticism of Resemblance.** We fare no better, however, if we say that particular objects *resemble* and are *copies* of the Forms they exemplify. To do so, involves us at once in an infinite regress—the difficulty of what Plato calls “the third man.” For suppose we say that human beings resemble one another by virtue of *resembling* and being *copies* of the Form of man. In that case, by virtue of what do they resemble the human Form? If *resemblance* means exhibiting one and the same Form, then the likeness of human individuals to the Idea of Man must mean that both they and it resemble and are copies of still another Form—a “third man,” of which the Idea of Man and the individual man are both examples. And this process of explaining resemblance by invoking further resemblance must be carried on to infinity.

### III. THE RELATION OF IDEAS TO MINDS

**The Ideas Are Not Thoughts.** Turning now to the puzzling question of the relation of the Forms to the minds which entertain them, Plato encounters further difficulties. Are the Ideas *thoughts* either of individual minds or of a divine mind? This question he answers in the negative. The Forms are not thoughts but the objects of thought, and exist independently of whether and what we think about them. If they were thoughts, then the concrete objects which exemplify them would also be thoughts; in which case all sensible objects would be

thinking beings, or else there would be such things as unthought thoughts.

**How Then Can We Entertain Ideas?** But if the Forms are not our thoughts, and if they exist *outside* and independently of our minds, how can we entertain them in our minds and think about them? Apparently they cannot be reached by our minds at all, and the resemblances and typical features we perceive in concrete objects have nothing to do with, and give us no knowledge of, the Forms as they are in themselves. To say that the Forms are thoughts of a divine mind only complicates matters. It makes them no less independent of our minds and inaccessible to them. And, if they are what God thinks about, then what *we* think about is as unknown to him as what *he* thinks about is unknown to us. In any case, we apparently cannot escape the conclusion that the Forms, if they exist in themselves independently of the particular minds that entertain them, can "have nothing to do with us, or we with them; they are concerned with themselves only, and we with ourselves."<sup>1</sup>

**Plato's Dilemma and Possible Escape.** So we end in a dilemma. If the Forms are objects common to many minds, they cannot be just the thoughts of any one of these minds, but must exist apart from and independent of all minds whatsoever. On the other hand, if they are what we think about, they must somehow be present in our minds. Otherwise we could not think about them—nor unless they were somehow present in sensible objects could those objects enact them.

Whether Plato ever succeeded to his own satisfaction in extricating himself from this dilemma we do not know. But it has been suggested that we may perhaps see an escape in the last part of the *Parmenides*, which is devoted to a very difficult and seemingly paradoxical demonstration of the interdependence of Unity and Plurality. This might be construed, we are told, as signifying a similar interdependence of the Forms on the one hand, and of particular things and minds on the other. Just, we might say, as the concept of Unity is meaningless apart from that of Plurality, so one and the same Form is neither one, nor the same, nor even a Form in any significant sense of the word, apart from the many concrete objects to which it gives character and unity, and the many individual minds to which it gives a common object of thought. Without objects to enact it, and minds to entertain it, it would have no place or function in the scheme of things.

Conversely, just as plurality cannot be conceived apart from unity,

<sup>1</sup> *Parmenides*, 134 A.



so objects, if they are to be even objects, must be some *sort* or *class* of objects. And minds, if they are to be intelligences, must think about something in common. Individual objects, then, and individual minds could not exist without the Forms to give character to the one and point to the other.

In short, real being is a one-in-many and a many-in-one whose unity depends upon its multiplicity, and whose multiplicity depends upon its unity.<sup>2</sup>

This, however, is a suggestion of modern scholars. Whether Plato himself so intended the last part of the *Parmenides* is an open question.

#### IV. WHAT IS KNOWLEDGE?

Granting, however, that Plato had solved to his own satisfaction the problems raised in the *Parmenides*, he was by no means out of the woods. For now the question arose how the mind, if it could really entertain the true Forms of things, could entertain false Ideas about them, as it obviously did when it was in error. This question Plato takes up in the *Theaetetus* and the *Sophist*.

**Truth Not Relative to the Individual.** In the *Theaetetus* he discusses what knowledge is, or rather what it is not. He first attacks the Protagorean doctrine, to which both the Cynics and Cyrenaics also subscribed, that knowledge is perception, and that the truth is what seems true to the individual at the moment. This doctrine, he tells us, gives us no ground for preferring waking to dreaming, or the experience of the human being to that of the pig or the baboon, or the perception of one man to that of another, as a criterion of truth. For that matter, Protagoras' own doctrine is self-contradictory. It proclaims as absolute truth that there is no such thing as absolute truth, and confesses that it is false to those who believe it false. Finally, knowledge means relating and formulating our sense-experience according to certain categories, such as being and not-being, likeness and difference, unity and plurality, etc., which are not given directly in our perceptions, but by some other faculty of the soul.

**Truth and Falsehood Not Matters of Opinion.** Shall we, then, define knowledge as *true opinion*? But how are we to distinguish true opinions from false, and how, moreover, can we hold *false* opinions? An opinion that we hold, we believe to be *true*, as long as we hold it. Nor can error arise from indistinct perceptions, like blurred impressions

<sup>2</sup> Cf. Burnet, *Greek Philosophy*, Part I, p. 272. Stewart, *Plato's Doctrine of Ideas*, pp. 80-81. Horn, *Platonstudien*, II, pp. 129, 155.

on a wax tablet, since we can make mistakes in abstract, mathematical thinking, as in the wrong addition of numbers. Again, error cannot consist in getting hold of the wrong Idea, as one might reach into a birdcage and grab the wrong bird. For we cannot mistake the "feel" of the bird of ignorance or falsity for the "feel" of the bird of knowledge. Then, too, opinions may just *happen* to be true. For example, judges in the law courts may *happen* to hand down perfectly sound opinions without having any real knowledge of the case whatsoever.

If we enlarge our definition, and say that knowledge is *true opinion, for which reasonable ground may be given*, we are no better off. For, paradoxically enough, the final grounds and reasons for our opinions, being *ultimate* explanations, cannot themselves be explained. All opinions, then, rest finally upon grounds for which no reasons can be adduced. Yet for all our inability to find explanations of these ultimate principles, we feel we *know* them better than the inferences we draw from them. How can this be? As Plato himself says, we would seem to have discovered rather what knowledge is not than what it is.

#### V. THE NATURE OF ERROR

**Self-Contradictions in Predication and Negation.** Perhaps, however, we can learn what knowledge is, if we first examine the nature of *error*. This Plato does in the *Sophist*. He begins by analyzing what we mean by *sophistry*, which, he tells us, consists in making people believe that what *is* is not and *vice versa*. But to assert the *non-existence* of the *existent* or the *existence* of the *non-existent* would seem to involve a contradiction in terms. Furthermore to predicate non-existence is to predicate nothing, and the existent itself seems to be a self-contradictory affair since it is both in motion and at rest, both the same and different, at the same time. All the philosophers so far—the Eleatics, the Heracliteans, the "friends of the Ideas" and the materialists—have stumbled over this block, since all have maintained that the Real at least seems to be both changing and unchanging, active and static. But how can the universe be, or seem to be, both in motion and at rest, or neither in one state nor the other?

The answer, says Plato, lies in the fact that while every Form is different from every other and is *not* any other, some Forms can be combined with one another, whereas some cannot. Hence the fact that one thing is *not* another does not necessarily preclude the possibility—denied by the Cynics, we may remember—of predicating one thing of another. We cannot, indeed, predicate Motion of Rest, or

Sameness of Difference, and *vice versa*; but these Ideas, although *not* the Idea of Existence, can be predicated of and combined with it. So, too, the fact that Motion and Rest are *different* from each other does not prevent either one of them from being the *same* as itself. Hence the *existent* can be both in *motion* and at *rest*, the *same* and *different*, without contradiction, although, of course, Motion and Rest, Sameness and Difference, cannot both be predicated of it conjointly.

**Difference Between Truth and Error.** The nature of truth and error is now fairly clear. Truth and knowledge lie in combining in our thinking and discourse Forms that will go together, and in combining them as they are really combined in the structure of the universe. Error comes from our failure to distinguish the Ideas that are both different and uncombinable from those which, in spite of their difference from one another and their *not* being one another, can nevertheless be combined. Such failure results in our asserting the existence of non-existent combinations of Forms and *vice versa*. It is the business of philosophy to distinguish clearly between the "not" that forbids and the "not" that permits the conjunction of Ideas, and thus to discover what Forms can be predicated of one another, and what cannot.

#### VI. THE REALITY OF THE SENSIBLE WORLD

**The Sensible World and Unreality.** Possibly these considerations threw further light upon the relation of the sensible world to the Forms. It will be remembered that in the earlier dialogues Plato had described the moving, changing world of particular things—the realm of *Becoming*—as a mixture of the *Being* of the Forms with *Not-Being*. The latter term, however, he had left almost without further definition, and it might seem to imply that the whole multiple, sensible, concrete, changing aspect of the universe, lacking as it did the characteristics of the true Being possessed by the Forms, was therefore unreal and illusory. The Eleatics, we may recall, had come to that conclusion for much the same reasons. However, if the "not" in Not-Being, instead of meaning non-existence, meant merely a kind of existence different *from* and *not* possessed by the Forms, then the sensible world was by no means reduced to illusion by not being the Ideas. Its reality, to be sure, was not the same as that of the Forms, but it was not thereby prevented from having a reality *other than* theirs. In the *Parmenides*, as we have just seen, Plato had argued that Unity and Multiplicity, far from excluding and annulling each other, not only were combinable, but could not *exist* without each other. In the

same way he may now be contending that, generally speaking, the formal and the sensible, the universal and the concrete, aspects of the universe, although not the same, are not only logically combinable but actually combined in the totality of Existence. In a moment we shall find him in the *Timaeus* trying to tell us what kind of being Not-Being really possesses.

#### VII. THE SOUL

Meantime another question was pressing for an answer—the problem of getting the Forms into dynamic, creative relation to the sensible world, and accounting for the changing, moving, “becoming” aspect of Reality. Here *soul* or *mind*, to which Plato paid no great metaphysical attention in the earlier dialogues, came in handy. The existence of the soul to be sure he had taken for granted, and had already made of her the knowing subject in the process of knowledge. And her uncreated and immortal nature he had proclaimed in the *Phaedo* and the *Phaedrus*. Also he had analyzed her in a rudimentary way in the *Republic*. And in the *Phaedrus* he had made her the self-moving and self-animating source of the life and movement of the body, and asserted her uncreated and indestructible nature. But he had not as yet found her particular niche in his universe.

At last, however, she was called upon to act as the natural intermediary between the Forms and the sensible world, and to that end she was elevated into a cosmic principle. For this service and this dignity she was naturally fitted, linked as she was through the senses to the world of sensible particulars, and through her intellectual activities to the Forms. She was bathed in change, and yet she was changeless. She was everlasting, but she could also become eternal. She was at the same time uncreated and creative, constant and variable, static and dynamic. It was to her, then, that Plato finally looked as the proper agent to put the Forms into effect and to enact and embody them in a physical world.

#### VIII. GOD

The growing metaphysical importance of soul is paralleled by that of God. In the earlier dialogues God figures little and casually. The Forms occupy the entire stage. Now he comes to the fore. He is located by Plato, not among the Forms, but in the soul-mind section of Reality. Indeed, in the *Parmenides*, we may remember, it is pointed out that his too intimate association with the Forms would deprive him of all concern and contact with the sensible world. He is rather

the supreme mind, the king of souls, whose function is to create and sustain the sensible universe and to direct all things for the best in his infinite wisdom and providence.<sup>3</sup> Nay more, in the *Laws*, Plato's last work, God, as we shall soon see, appears to have supplanted the Forms in Plato's affections and thought.

**Plato's Views of God.** Much of Plato's talk about God is highly ornate, figurative, and poetical; so much so indeed that many critics are inclined to regard his picture of a personal creator as a purely fanciful and "mythological" way of stating that the Forms are dynamic and formative, not purely static and self-contained principles. Indeed, there is no point more disputed and no question more open than the problem of just what Plato really does mean by God.

However that may be, in the *Philebus* and the *Timaeus* God appears in sober metaphysical guise. In the *Philebus*, we are told, Reality may be divided into four parts: the Determinate, the Indeterminate, the Mixture of the two, and the Cause of the Mixture. Though the coincidence is not perfect, the determinate would seem to correspond to the Forms, the indeterminate to the principle of "Not-Being," and the mixture of the two to the sensible world. The cause of the mixture lies, we are told, not in chance or unreason but in the "marvelous intelligence and wisdom" of a supreme living mind. To the part played by God in the *Timaeus*, we shall turn in a moment.

#### IX. THE IDEAS AS NUMBERS

**Mathematical Approach to the Ideas.** But, if the description in the *Philebus* of the cause of the mixture throws light upon the increasing importance of theology in Plato's system, the appearance of the Pythagorean terms, limit and the unlimited, the determinate and the indeterminate, as designations respectively for the Forms and Not-Being suggests another no less interesting development of his thought. Plato was a scientist as well as a mystic and poet, and mathematics and the mathematical philosophy of the Pythagoreans had always fascinated him. We have already seen how prominent a place he assigns to arithmetic and geometry in his plan of education. In the *Philebus* we may also remember that he was seeking an exact mathematical statement of the *ratio* the ingredients of the good life should bear to one another. Moreover, limit, or the determinate, is essentially a mathematical concept. To give the precise nature of a thing is to state its *formula*.

<sup>3</sup> Cf. *Sophist*, 265 C-E; *Statesman*, 269 A-274 E.

Margins of variation and error in description introduce an element of uncertainty and indeterminateness.

**Basic Character of Ideas of Numbers.** The independent evidence of the *Philebus* suggests, then, that Plato was busy attacking the Ideas from a new angle and was seeking to develop their mathematical implications as the objects and guides of exact scientific method. This evidence is borne out by a statement of Aristotle's that Plato believed the Forms to be essentially Number-Forms. Aristotle adds, moreover, that Plato considered these Number-Forms to be "unaddible," or incapable of mathematical manipulation, and that he interpolated between them and the world of sensible objects a third world of mathematical entities, our ordinary numbers, which unlike their prototypes could be added, subtracted, multiplied, and divided. This statement of Aristotle's has given rise to much conjecture and controversy, but many modern critics find in it perfectly good sense, and see in Plato a prophet of our latest and most up-to-date scientific thought.

Let us take first the statement that the Ideas are numbers, and examine it in the light of modern science. The chemist of today gives the formula, or Platonic Idea, of water as  $H_2O$ . But the Form of water as such evidently lies in the 2, rather than in the H or the O, since hydrogen and oxygen combined in other proportions would not give water. Again, the physicist of today tells us that the difference between the hydrogen atom and the oxygen atom lies in the fact that the one consists of a single electron revolving about a nucleus, the other of eight—so that here again the *number* of electrons is the determining factor in the nature or Form of the element in question. For that matter, the differences of all the chemical elements are differences of nothing but number and geometrical arrangement. Plato, then, would seem to be merely anticipating modern science, when he seeks to resolve all Forms into basic Number-Ideas.

Moreover, Plato would seem to be right in asserting that these Number-Forms, though the bases of mathematics and hence of scientific knowledge and description, are themselves incapable of mathematical manipulation. The nature, or definition, or, in other words, the Form of a number cannot be added to, subtracted from, multiplied, or divided. Nor can the Form of the circle be divided into two definitions of the semicircle, or be intersected, or segmented. For instance, to repeat four times the definition of the number one does not give us the nature or Form of the number four, nor can we inscribe the definition of the triangle within that of the circle, and *vice versa*.

**The "Addible" Numbers.** Turning now to the statement that there is a realm of mathematical entities, which are "addible," and that these addible numbers mediate between the Idea-Numbers and the multiplicity and extension of the sensible world, we find that this, too, is not a fancy but a fact. The numbers used by mathematics can be added, subtracted, multiplied, and divided. And they really do hover midway between the Number-Forms and the sensible objects. The mathematical number two—or 2—is not Twoness.<sup>4</sup> It is expressive of a given pair of objects, whereas Twoness is the nature or Form of all pairs. But neither is the number two to be identified with two particular things. It is "any old" two, equally applicable to all pairs of all sorts wherever we come across them. And yet, in spite of the fact that it is general, it is still always *a* two, not *the* Two. For *the* Two is the definition or Form of *a* two; that is, of any old two. The same is the case with the circle, for instance, of geometry. It is not circularity, or the Idea of the circle, and yet it is not any one particular circular thing. It, too, is *a* circle, not *the* circle. In a sense general in nature, it can be still intersected and subdivided like a concrete thing, although in so handling it we do not have to break up or interlock two particular sensible circles like this plate or that wheel. Plato is then making the best of sense when he distinguishes the "figures" of our geometry books and the 1, 2, 3, 4, etc., of our arithmetics from the Number-Forms on the one hand, and from the sensible instances of number and of geometrical figure on the other.

**Derivation of the Number Series.** Our difficulties, however, are not over. How can even mere mathematical numbers be addible? The unit and the point would seem to be the basic elements from which arithmetical and geometrical processes start. But both the unit and the point are in themselves incapable of self-propagation. The unit will not spontaneously reproduce or subdivide, the point will not spontaneously repeat itself or flow into a line. Something more is necessary, if we are to derive plurality from the unit, extension from the point, the many from the one.

This something, Aristotle tells us, Plato found in the "indeterminate dyad" or principle of "the-great-and-the-small." But if we mean by the dyad just Twoness, or the nature of plurality, as Aristotle interpreted the term, the result is nonsense. The Number-Form of twoness *plus* 1 would bear no fruit. For that matter we could not speak of

<sup>4</sup> It must be remembered that the Greeks were without our system of arithmetical notation, introduced later into Europe from India *via* Arabia.

"and" or "*plus*" unless we first had a pair of objects to unite, and therefore the number two already present. But, if we follow some modern critics who regard the dyad as Plato's way of saying "twice," the difficulty is cleared up. Twiceness is not a Number-Form, just as "twice" is not a number or limit. It is rather a signal to go on and expand to an indeterminate extent. If then we combine the number one with twiceness we get twice one = two; if two with twiceness,  $2 \times 2 = 4$ , and so on *ad infinitum*. In this way the whole series of even numbers can be produced from the number one.

**Generation of the Odd Numbers.** The odd numbers, Plato said, were generated by the "equalizing" or "stabilizing" of the dyad by the unit. This is somewhat blind, but we may remark that if we tip twiceness on its back, it becomes one halfness.  $2 \times 1$  inverted becomes  $\frac{1}{2} \times 1$ . And if we apply one halfness to the sum of any two adjacent even numbers, we get the odd number sandwiched between them. Thus  $2 + 4 = 6$ , and one half of  $6 = 3$ . Or  $4 + 6 = 10$  and  $1\frac{1}{2} = 5$ ;  $6 + 8 = 14$ , and  $1\frac{1}{2} = 7$ , etc. According to this theory, we see, the "dyad" stands for the *plus* and *minus*, the *times* and *divided by* aspect of mathematics.

**The Continuum and Fluxion.** The suggestion has also been made that in describing the dyad as the great-and-the-small Plato was on his way towards the theory of the *continuum* and of "*fluxion*," according to which the line is formed, not by the addition of discrete points, but by the continuous flowing of its starting-point, and the plane, not by the laying down of separate lines side by side, but by pushing the whole line at an angle to its length. If this be so, Plato had solved the paradoxes of Zeno, which remained insoluble as long as space was regarded as divisible into discrete parts, and had forestalled our modern mathematical union of arithmetical and geometrical concepts. Nay more, he had mathematicized not only the realm of Being but that of Becoming as well, and had identified the principle of change and motion with that of numerical plurality and geometrical extension. In a moment we shall find him also "mathematicizing" the realm of Not-Being, and, by reducing it to pure space, showing how it necessitates mathematically flux and multiplicity.

## X. THE CREATION OF THE UNIVERSE

**Chaos into Cosmos.** We now return to the *Timæus*. There we find a highly picturesque account of the creation and structure of the phys-



ical world. Incidental to it, we have also the attempt we have just mentioned to define the principle of Not-Being and Matter in terms of pure extension. In the beginning, we are told, God was confronted with unformed chaos agitated by disorderly and irrational motion. Being good, he desired to impart and share his goodness, and to that end he sought to bring chaos into conformity with the world of perfect and eternal Forms, to which he looked as guiding models. Working from the top down, he fashioned first a principle of life and animation by mixing the natures of Being and Not-Being (or, as Plato now calls them, the Same and the Other). This principle, which, because of its dual nature, was capable of bringing Form and Matter together and of transforming mechanical and random movement into purposive and living activity, was the World-Soul.

The World-Soul was then cut up into the fundamental activities of the universe—an outer circular movement, uniform in character, designed to animate the heaven of fixed stars, and seven divergent, irregular motions within, to carry the planets. This “astral” framework was clothed with material made of the four elements, whose rudiments were thrashing aimlessly about in the original chaos. The stars and planets were created for the particular purpose of measuring time, whose everlasting flow is the moving image of eternity. The earth was set at the center of the universe.

**Creation of Souls.** For the stars the maker created divine souls, and to these lesser gods he entrusted the contriving of animate creatures, which the universe still lacked. However, he himself made the souls of these creatures out of the World-Soul well diluted. And he dispersed them among the stars and arranged for their incarnation in men and animals.

And so the visible universe was at length complete. It was a perfect sphere, uniting soul and body, in which the whole system of Forms, or Idea of the perfect living being, was given as complete concrete expression as the nature of Not-Being, or Matter, as Plato now calls it, permitted.

We may note in passing that Plato here admits that the soul is not the cause of all motion. He attributes to Matter a blind or random movement of its own, for which the soul-principle is not responsible. But in the *Laws*, as we shall see, he reverts with emphasis to the position that all movement and activity of every sort must be caused by soul.

## XI. THE NATURE OF MATTER

The most significant portion of the *Timaeus* is perhaps that in which Plato deals with the nature of Matter, or Not-Being. Such a principle, he says, must exist. Obviously the sensible world is in part *other* than the Forms, and its difference must rest upon a principle that is different from them. Moreover, sensible objects keep *changing* their Forms, and change requires a substratum—a something which is no more *this* Form than it is that, but is simply “thus and thus.”

**Matter Formless and Void.** This “something,” however, can have no Form of its own, since, if it had, it would not be different from Form and could not change. Hence the “otherness” of the sensible world from the world of Ideas does not lie in its possession of any other *Form* of Being. It must lie rather in the projection of the Forms into a “formless” dimension of Reality, which somehow imparts to them the appearance of a moving, changing world of particular objects. How can this be?

Plato’s reply to the question is that their combination with *space* gives them multiple, sensible, moving embodiment.

In other words Not-Being, considered as the substratum of Becoming, is empty space—space so empty and blank that not even dimensions or geometrical configuration can be ascribed to it, since even the most primitive geometrical structure would imply the presence of Form. This sheer emptiness can be neither perceived nor conceived. And yet we are haunted by its presence and have a kind of “bastard” concept of it, to use the Platonic phrase, just as we somehow “see” darkness which is, logically speaking, utter absence of visibility. When all form and content have been thought away, we still retain the sense of their *place*—the spot *where* they were and *where* they may reappear.

This formless space is the “receptacle and in a manner the nurse of all generation”<sup>5</sup> in which the Ideas father the sensible world. It “is stirred and informed by them, and appears different from time to time by reason of them.”<sup>6</sup> As a matter of fact, it was never without their impress. The stuff that God confronted in the beginning was space already laid out geometrically, exhibiting tri-dimensionality and the rudimentary solid figures characteristic of the four elements.

<sup>5</sup> 49 A.

<sup>6</sup> 50 B.

**Space Makes Participation and Resemblance Intelligible.** This spatial interpretation of the principle of Not-Being or "Otherness" which made the sensible world of Becoming different from the Forms and accounted for its spread-out, multiple, changing, solid, and concrete character, may have provided Plato with a final solution of the problem of the relation of the sensible world to the Forms, and have cleared up for once and all the questions of participation and resemblance. For it was now possible to see that sensible objects, although different from their archetypes, need not be copies of them, and that the Forms need not be parceled out among their instances, but could be present in their entirety in each one of their multiple embodiments.

Being formless and void, Space had no Form of its own, but was simply another dimension, so to speak, of Being in which the Forms were projected. It added no new Form to them, in embodying them, nor did it in any way duplicate or copy them or divide them up in so doing. In the same way, we might say, a stereoscope imparts the dimension of depth to a photograph without adding or subtracting anything from it, and without reduplicating it or copying it. And if the stereoscope were also kaleidoscopic, and multiplied the photograph and imparted to its multiple projections motion as well as depth, then each one of the solid, moving images perceived by the eye would show not a part of the photograph but the whole of it. So, too, space in presenting the Forms as a multiplicity of solid, moving images allows each Form to be wholly present in each one of its instances.

**Physical Space and Mathematical Law.** Physical matter, or physical space, is the result of impressing upon blank *place* the simplest of all geometrical plane figures, the Form of the triangle, and then producing the solid by the projection or juxtaposition of these planes. In this way, the material principle had already been impressed in a rudimentary fashion with the Forms of the four elements before God took a hand in the process of creation. His work simply lay in refining these elements, in introducing rationality and purpose into their movements, and in combining them according to the pattern of the higher Forms.

It will be noticed that by thus "geometrizing" pure space or Not-Being Plato supplemented his "mathematicizing" of the world of Forms. Not only were the Ideas expressible in mathematical formulae, but Not-Being was now reduced to terms of extension pure and simple, and all Becoming could be interpreted as essentially change of place. Mathematical law at last reigned supreme throughout Reality. This

accomplishment of Plato's has been hailed by some critics as comparable with our modern extension of mathematical concepts to the physical sciences.<sup>7</sup>

## XII. THE PROBLEM OF EVIL

**Variety of Plato's Answers.** Plato, however, had still another problem on his hands—that of explaining why the sensible world was such a poor expression of the world of Forms. The particular object blurred the Idea. The universe, in spite of the rationalizing of its movements, still went wrong. Ugliness existed side by side with beauty, and human institutions, individuals, and behavior fell woefully short of their ideal prototypes.

To this question Plato gives no consistent answer. For the most part, perhaps, he tends to attribute the imperfection of the universe to the intractability of the material principle. Matter, for all its essential formlessness and passive receptiveness of all Forms, somehow resists the process of formulation, and to this resistance, or element of "necessity," in things, ugliness and evil are due. But in the *Parmenides*, as we have seen, Plato suggests that there ought rightly to be Forms of ugly and evil things, as well as of the beautiful and good. Again, moral shortcomings are, as in the *Phaedrus*, now assigned to some coarseness existent from all eternity in the soul, and now, as in the tenth book of the *Republic*, to the misuse of free-will. Finally, as we are about to see, in the *Laws*, in which Soul is proclaimed the one and only source of all motion and activity whatsoever, the necessity of accounting on this hypothesis for irrational, disorderly, and subversive movement leads Plato to the doctrine of a quasi-personal devil.

**Theological Character of the Laws.** By the time Plato wrote the *Laws*, his philosophy had apparently become theological. The doctrine of the Ideas seems to have retreated into the background, and God monopolizes the picture of real Being. His majesty and glory are celebrated in terms that remind us of the Hebrew prophets. He is a divine mind and reason governing all things, as is shown by the orderliness and rationality of his handiwork. He is just, good, a champion of righteousness, forever at war with evil and disorder, dispensing punishment and reward to men according to their deserts. His commandments are the foundation of the State, and all law is in essence the enactment of his commands. Atheism is the root of all evil, and dis-

<sup>7</sup> Notably by Taylor, Robin, Natorp, and Zeller.

believers and heretics should be spied out, denounced, and punished with the utmost severity. Since Soul is the source of all life and motion, the opposition to the divine will must originate in a soul or souls opposed to God. There is an evil world-soul, whether it be one or many, that fights the divine purpose, and with which God is incessantly at war.

This doctrine, it has been suggested, was influenced by Plato's inclination to dramatize and magnify to cosmic proportions the struggle between good and evil. It was perhaps also fed by his acquaintance with Zoroastrian dualism, which depicted the universe as the scene of an everlasting struggle between the powers of light and darkness. It was, moreover, a logical conclusion of his teaching that all cosmic life and activity originate in Soul and are purposively directed by Mind.

### XIII. LAST WORDS ON POLITICS

We pass now to Plato's last words on politics. Bitter experience would seem to have disillusioned him of the practicability of the political constitution set forth in the *Republic*, and we find in the later dialogues a more realistic attitude. In the *Statesman*, for example, he is willing to concede that as long as statesmanship is displayed in government, the kind of constitution a state adopts is of minor importance. At the same time, statesmanship is best exercised by a single person under constitutional restraints. Hence limited monarchy is the best practicable form of government. Next comes aristocracy, bridled by law, and after that constitutional democracy. Tyranny, oligarchy, and mob-rule are the lawless forms of the three limited types. Mob-rule in which the will of the majority is free from legal restraint is, however, better than oligarchy or tyranny, since it is on the whole less oppressive.

**The Best Practicable Form of Government.** The best practicable type of citizen is one in whom antagonistic virtues offset one another in such a way as to produce a harmonious balance of temperance and courage, peacefulness and high spirit, reflection and action. It is one of the chief tasks of a statesman to breed and educate this blend of qualities in the people.

In the *Laws* Plato assigns even more importance to law and less to the particular kind of political constitution. The great thing is that the divine commandments shall be enforced, for God is the head and the foundation of the State. A combination of constitutional democracy and limited monarchy is the most practicable form of government

for putting divine law into effect. Plato dispenses, however, with a single king and replaces him with a supreme council elected by the people. Towards the end of the Dialogue he does, to be sure, revert towards the philosopher-kings of the *Republic*, and suggests that the duty of preserving the constitution and the laws intact shall be entrusted to a "nocturnal council" composed of ten elders of wide experience, and ten young men chosen by them, all of whom shall have received a special education in right action, correct theology, and the mathematical exactitude of thought inculcated by astronomy. But this is something of an afterthought.

**Legal Code.** The greater part of the *Laws* is devoted to enumerating the rules and regulations of which Plato approves and feels that God approves. These were probably gathered from the codes of various Greek cities and especially from contemporary Athenian law. The civil and criminal fields are covered at length, and the machinery, political and judicial, necessary for running the State and preserving law and order is described in detail. Rules, for example, dealing with marriage and the family, with the ownership and transference of property, and with the conduct of business, are laid down in the civil field, and crimes are enumerated and their punishment prescribed. Punishment, Plato insists, should be remedial rather than vindictive. Education is provided for very much along the lines suggested in the *Republic*, and the arts are again attacked for their demoralizing effect. Methods of election and the nature and number of magistracies are provided for, as are the organization of law-courts and the selection of judges. International relations are also discussed.

Into the detail of all this we have no time to penetrate. But we may note in general the theocratic, austere, puritanical, and even at times fanatical tone that characterizes the dialogue and makes us feel that Plato, in spite of his genius, did not, like good wine, mellow as he grew old. We turn now to Plato's pupil, Aristotle, who ranks with his master as one of the greatest and most influential philosophers of all time.

## *Chapter XIII*

# ARISTOTLE

### I. ARISTOTLE'S LIFE

**Education.** Born in 384 B.C. in Stagira, a town in the peninsula of Chalcidice in Thrace, Aristotle entered the world surrounded by none of the pomp and circumstance to which Plato fell heir. He came, rather, of a long line of provincial doctors and emerged from a comparatively middle-class background. But his father must have been a man of more than average ability and prominence, for, while Aristotle was still a child, he became court physician to Amyntas of Macedon, the grandfather of Alexander the Great. This meant the removal of his family from Stagira to Pella, the newly established and somewhat unkempt capital of the Macedonian kingdom, where a portion, at least, of Aristotle's boyhood was spent. His parents died while he was still young, and he was given a home and an education by a friend of the family named Proxenus. At the age of eighteen he went to Athens to study at Plato's Academy, where, we are told, his affected ways and the care he lavished upon his personal appearance caused the college authorities some concern. There are also stories of disputes with his masters and of strained personal relationship, but these are probably gossip. How far he actually differed from Plato while still at the Academy is an open question. The fragments of works written during his discipleship are seemingly thoroughly Platonic in tone.

At Plato's death the leadership of the Academy passed to his nephew and legal heir, Speusippus, who was a second-rate man. Aristotle's tutelage was at an end. Being somewhat at loose ends, he accepted an invitation from a college friend, Hermeias, who had bought the towns of Atarneus and Assos in the Troad and the title of Prince from the Persian government. He stopped for a while at Atarneus, also at Mytilene, where he devoted himself to biological research. At this time he married Hermeias' sister or niece, Pythias, by whom he had a daughter.

**Tutor to Alexander the Great.** Amyntas of Macedon was now dead, and his son Philip, with whom Aristotle had perhaps played as a child, had become king, and had begotten in his turn a son, Alexander. Interested in science and art, in touch with Athens and the Academy, and acquainted with Aristotle's brilliant career, Philip offered him the job of tutoring the boy, now twelve years old. Aristotle accepted, and in 343-342 B.C. returned to Pella—which had become a bustling, spick-and-span, up-to-date city, and the garrison town of the most powerful army in the western world. Here Aristotle spent the next four years, educating Alexander, and seeking to imbue him with the reverence for Greek ideals and institutions and the contempt for "barbarians" or, in other words, non-Hellenes, that he himself felt so keenly.

His tutorship was interrupted and virtually brought to an end, by the appointment of Alexander, then sixteen years of age, as regent, while the king carried on the campaign that ended in the subjection of all Greece at the battle of Chaeronea in 339 B.C. Three years later Philip was assassinated and Alexander ascended the throne. Aristotle was free once more, and his inclination was to go back to Athens, which was full of old memories and old friends, and by far the most stimulating place for literary and scientific work. During the war it would have been unwise for him, because of his Macedonian affiliations, to return there, but now the city was "pacified" and safe.

**Return to Athens.** So the spring of 334 B.C.—the same spring that Alexander was off to Asia on his conquest of the world—saw Aristotle back in his old haunts. He could not, of course, re-enter the Academy, of which Xenocrates, an old friend, but, like Speusippus, second-rate, was now president. He was too big a man and too conscious of his own powers for that. He had, moreover, a new philosophic system to expound, innumerable scientific researches in various fields to occupy him, and perhaps large collections of data on his hands. The only solution was to set up a school of his own.

**Foundation of the Lyceum.** This he did by first gathering his pupils about him in a park near Mt. Lycabettus, dedicated to the Muses and Apollo Lyceus, and called after Apollo's title, the Lyceum. By this name his school came to be known, and from his habit of walking up and down with his pupils as he lectured, the group was called "Peripatetic"—a label that became the official designation of the Aristotelian system. His more technical lectures were given in the morning, but afternoons he held crowded classes in rhetoric and oratory. Meantime he carried on his scientific researches, subsidized, it would appear, by Alexander. He rented land and built buildings to house



his collections and his manuscripts. Residential halls also sprang up, a college chapel was erected and dedicated to the Muses, and there was a commons where his pupils dined together and held "symposia" or convivial meetings devoted to food, drink, and philosophic converse. The Lyceum quickly outstripped the Academy, but Aristotle seems always to have kept on pleasant and friendly terms with his Alma Mater.

**Aristotle's Genius.** In the next twelve years of his life he completed a prodigious amount of work—all his extant writings, not to speak of many lost ones, as well as a profound and detailed research in every field of knowledge. Physics, astronomy, biology, physiology, anatomy, natural history, psychology, politics, ethics, logic, rhetoric, art, theology and metaphysics were all explored and mapped by him. He is probably the only human intellect that has ever compassed at first hand and assimilated the whole body of existing knowledge on all subjects, and brought it within a single focus—and a focus, at that, which after more than two thousand years still stands as one of the supreme achievements of the mind of man.

The fruits that have come down to us of all this study and meditation comprise the great work on logic known as the *Organon*; the *Physics*, the *De Caelo*, the *De Generatione et Corruptione*, and the *Meteorologica* in the field of the physical sciences; in biology, physiology and psychology, the *De Anima*, the *Parva Naturalia*, the *Historia Animalium*, and other treatises on natural history; and finally the *Metaphysics*, the *Nicomachean* and the *Eudemian Ethics*, the *Politics*, the *Rhetoric*, the *Poetics*, and the *Constitutions*, a chapter of which on the *Constitution of Athens* has been lately recovered from an Egyptian papyrus.

He had been back in Athens but a short time when his wife died. Soon afterwards he formed a lasting liaison with a lady named Herpyllis, who survived him. She bore him one son, Nicomachus.

**Estrangement from Alexander.** To this period belongs also the beginning of his estrangement from Alexander. On the one hand, Aristotle was annoyed and disturbed by the king's behavior. Alexander, after his conquest of Persia, had assumed the diadem, the robes, and the state of the fallen Darius. His court was conducted with Oriental pomp and ceremony. The oracle of Ammon in Egypt had proclaimed him son of Zeus, and he demanded that divine honors be paid him by all who entered the Presence. He had married one Bactrian and two Persian princesses, and it looked as if Macedonia and Greece would eventually be ruled by a half-breed, Eurasian despot. He had moved

the capital of the empire to Babylon, mated his soldiers with native women, appointed Persians to positions of honor and responsibility, both civil and military, and generally fraternized with the "barbarian." All this must have been gall and wormwood to Aristotle. His teaching had been in vain. Alexander had proved renegade to the ideals of Hellenic moral superiority and political supremacy with which his tutor had been at such pains to imbue him.

The king, on the other hand, had grown intensely suspicious, though without reason, of the loyalty of his regent, Antipater, whom he had left behind in Macedon to keep Greece in order. And this suspicion had come to embrace all of Antipater's friends, among whom Aristotle was counted one of the staunchest and most intimate. It was, however, the behavior and fate of Aristotle's nephew, Callisthenes, that brought the latent animosity to an open breach. He was a very worthy and rather dreary young man for whom his uncle had procured the post of historian to the expedition. He soon gained the king's ill will by his open disapproval of Alexander's Oriental proclivities and preferences. Eventually he was accused of complicity in a plot against the king's life. He seems to have been innocent of any connection with it, but he was tortured and put to death. Alexander suspected Aristotle of being privy to the conspiracy, and wrote an angry letter of denunciation to Antipater. Fortunately, he was too taken up with his projected invasion of India to make good his threats. But Aristotle's feeling for his erstwhile charge can scarcely have been sweetened by the unjust execution of his nephew and the equally unjust charges against himself.

**Death of Alexander and Aristotle.** In the spring of 323 Alexander died suddenly, apparently from getting drunk while down with a bad attack of malaria. He was not quite thirty-three and had reigned for nearly thirteen years. Though his death was due to natural causes, the slander was soon abroad that he had been poisoned at the behest of Aristotle and Antipater. Thanks to the energy of Perdikkas, to whom he had left the regency of the empire pending the birth of the child with whom the Bactrian wife, Roxanna, was pregnant, things held together for a short time after his death. But Greece was in immediate and open rebellion, inspired by the fanatically anti-Macedonian orator, Demosthenes, and it was a full year before Antipater could put down the uprising.

Aristotle, because of his Macedonian connections and his friendship with Antipater, had found it imperative to leave Athens at once. He was accused like Socrates, for want of any better reason, of offending

against the established religion. Not wanting, as he said, "to give the Athenians a second chance of sinning against philosophy," he retired to a country estate in Chalcis on the island of Euboea, which he had inherited from his mother. A year later he died there of a disease of the stomach from which he had been suffering for some time. He was sixty-three years old.

## II. ARISTOTLE'S SCIENTIFIC OUTLOOK

**Aristotle's Temperament Different from Plato's.** As we have already noted, it is an open question how early in his career Aristotle parted company with his master's teachings. Accounts of certain writings<sup>1</sup> dating back to his Academy days, would seem to indicate that for a time he accepted Plato's idealism and theism, doctrine of immortality, dualistic ethics and anti-worldly scheme of salvation. But his whole temperament and outlook on life were fundamentally at variance with Plato's. He was not addicted to causes and reforms, and his heart rarely, if ever, got the better of his head. He was a spectator, not an actor; cool, analytical, judicial and unpartisan, not easily stampeded by enthusiasm or disgust. Essentially a scientist and a realist, he was intent on discovering the true rather than establishing the good. And this impartial, unsqueamish, scientific temper, hospitable to all data, and equally receptive of any reasoned conclusion to which investigation of them might lead, became more marked as he grew older.

Plato's death and Aristotle's departure from the Academy appear to have unleashed these tendencies. From the dialogue *On Philosophy*, probably written at Assos or during the early years at the Macedonian court, both the Platonic Ideas and the Platonic creator, which figured in his first writings, have been erased. The universe is proclaimed to be uncreated—a cardinal point in Aristotle's system. And God has apparently been already shifted from his previous, Platonic task of actively fashioning and ruling all things for the best, to his distinctively Aristotelian role of inspiring motion and activity in the universe through no will or effort of his own, but simply by the attraction of his supreme perfection. To this point we shall return in a moment.

## III. CRITICISM OF PLATO

**Universals Not Independent Substances.** Aristotle seems to have broken with Plato over the question of the relations of the Ideas to

<sup>1</sup> The *Eudemus* and *Protrepticus*.

the sensible world. He felt that by separating the Ideas from their sensible instances, and by attributing to them an independent existence of their own, Plato had rendered them powerless to explain either the existence or the moving, changing character of particular objects. For that matter, it was impossible to conceive the Ideas as having even a being of their own apart from the individual things that embodied them. How, for example, could we conceive of a human-nature-in-itself existing outside of and independent of individual human beings? Where and what would the Idea of the bed be, if there were no such *things* as beds. Moreover, Aristotle felt, when Plato asserted the independent existence of the Idea, he turned the Idea itself into a thing. He thought of human-nature-in-general, as if it were a sort of gigantic, deified particular man—existing side by side with ordinary human beings, who imitated its perfection, so far as they could, in their appearance and behavior. But to attribute particular, concrete existence to the universal, which was abstract and general, was a contradiction in terms. These difficulties became especially glaring in Aristotle's opinion, when Plato reduced the Ideas to numbers. With the "mathematicizing" tendencies of his master, which later were pushed to extremes by the Academy under the leadership of Speusippus and Xenocrates, he had no patience whatsoever.

If the advocates of the "one-story" interpretation of the Ideas are right, Aristotle misunderstood Plato, and the criticisms we have just been recounting are beside the point. But whether to the point or beside it, they started Aristotle off on his own philosophic adventure.

**The Concrete and Individual Character of Substance.** If the Platonic Ideas or Forms proved to have no vitality or punch of their own when divorced from particular things, one conclusion was plain. Real Being was not to be sought and found in universals—human nature and courage-in-itself, and the character all beds have in common, as Plato had maintained. It was located and could be discovered only in the particular, the individual, and the concrete. The real was always a concrete thing. *Substance*, Aristotle insists, is *primarily and essentially individual*. Whenever we come across it, we find it to be a determinate, particular *thing*, and a thing that is *essentially* itself and nothing else. Universals, to be sure, or general types, which classify individuals and define their essential and distinctive properties, may be called "substances" in a secondary sense and by courtesy. And the species and subspecies that more and more closely define the individual thing and set it apart from all other things have even more right to the title.

But in its full and primary sense the term is applicable to the individual alone.<sup>2</sup>

At the same time, Aristotle was quick to realize that there was much to be said for the Platonic position. In the first place, though the universal can never be found or dealt with except in particular things, it really is separable from them for the purposes of thought and knowledge. We can abstract from a class of individual objects what they have in common, and entertain a general notion about them. Indeed, *knowing* a thing means knowing *what* it is, and knowing *what* it is means classifying it under the general type or law that it exemplifies. Here we may note that Aristotle created for himself a dilemma from which he never succeeded in extricating himself. The object of *knowledge* was the universal. Science meant the reduction of the individual to general terms. And yet, the individual as such was the only true substance and reality. Hence it looked as if knowledge and science were not concerned with Reality. This disparity between the real and the knowable was never overcome.<sup>3</sup>

#### IV. FORM AND MATTER

**The Universal Essential to the Particular.** Again, the Platonic Idea, though it had no existence outside of the particular, was a very vital and forceful element *in* the particular. It was decidedly not accidental or superficial, as the Cynics and Cyrenaics maintained. Remove it from the individual and the individual itself perished. For any concrete, particular thing, if it was to exist as such, had to be not only this particular object rather than that, but also this *sort* of object rather than that sort. Unless it were some *kind* of thing, it was not a thing at all.

In every sensible substance, then, two elements or aspects are fused. On the one hand, there is *Form*, which makes it the kind of particular it is; on the other, there is *Matter*, which makes it particular and concrete, and individuates it from all other particular, concrete objects of its kind. These two aspects cannot be separated from each other as Plato, in Aristotle's opinion, had maintained. On the contrary, they can never be found and cannot exist apart from one another. Absolutely formless Matter or matterless Form is never met with in the sensible universe. Hence the Aristotelian dictum—*No Form without*

<sup>2</sup> *Met.*, V, 8; VII, 3-4.

<sup>3</sup> Cf. Zeller, *Aristotle*, pp. 334 ff., 377 ff. Ross, *Aristotle*, p. 171.

*Matter, no Matter without Form*, so far, at least, as the sensible world is concerned.

**Identity and Relativity of Form and Matter.** Moreover, Aristotle feels, the two aspects of Form and Matter, which everything displays, are not even two separate sides of a substance. They denote rather two different directions in which each particular thing points. On the one hand, every sensible object exists by virtue of realizing and giving new Form to possibilities latent in other substances. On the other, no sensible substance completely exhausts and realizes within itself its own capacities. It is also a stuff of which other things can be made—a possible something else. It is, then, at the same time both Form and Matter, Form relatively to what has made its existence possible, Matter relatively to what its existence, in its turn, makes possible.

Take grass, for example. It could not grow without earth, and in its growth it realizes and gives Form to the ability of the soil to support vegetable life. It is a Form, of which earth is the Matter. But grass is also fodder for cattle, and is capable of being transformed into beef. In other words, its substance is a stuff or Matter to which beef gives a new Form. Grass, then, is at the same time Form relatively to the earth that it feeds on and transforms into its own substance, and Matter relatively to the cattle which can feed on it and turn it into the Form of beef.

To express more clearly this relation between Form and Matter and their inseparable and interchangeable character in the same object, Aristotle uses the terms Actuality and Potentiality.<sup>4</sup> Every sensible object is an actualization of potentialities resident in other substances, and in the act of actualizing them it also acquires new potentialities of its own which make the actualization of further Forms of concrete existence possible. In short, each new Actuality is also a new Potentiality. In the language of Form and Matter, it is both a new Form in which other objects have been cast, and a new Matter for recasting in the Forms of still other substances.

**The Actual Nature of an Object and Its Potentialities.** Hence it is the actual nature or Form of an object that determines the object's potentialities and what it shall be suitable Matter for. For instance, only when the potentialities of earth have been actualized in vegetable life, do the potentialities of cattle or of ships—in the Forms of fodder and timber—come into existence. Cattle cannot browse on earth, neither can ships be built of it. Nor can cattle browse on wood or

<sup>4</sup> For Aristotle on Actuality and Potentiality, cf. *Met.*, IX.

ships be constructed out of grass. Earth, then, though it is potentially fodder and trees, is not potentially ships and cows. It is the actualized Form of grass that is potential beef, and the actualized Form of wood that is potential ships.<sup>5</sup>

We can now see that Aristotle means by Matter something quite different from what we ordinarily mean by it. To us Matter signifies primarily physical matter—something extended and solid. To Aristotle, however, it signifies anything, physical, mental, moral, or spiritual, that can contribute to the existence and make-up of anything else. We today still speak of human passions, emotions, and interests as good “material” for a novel, or of a man as having good “stuff” in him, or as being good Presidential timber. This meaning of the word, which has become secondary and metaphorical for us, was its primary meaning for Aristotle. Physical matter was for him simply one of innumerable “stuffs” and potentialities.

#### V. CHANGE AND ITS CAUSES

The process of Becoming in all its phases—motion, change, growth and decay, generation and dissolution and the like—can, Aristotle thinks, be defined as a process of actualizing the potential and of turning what is relatively Matter into what is relatively Form, or conversely of relapsing from comparative actuality to comparative potentiality.<sup>6</sup> In the creative processes of Nature, the fashioning of artificial objects, and even in the movement of bodies in space, the earlier stages and positions make possible the later, and the later actualize the potentialities provided by the earlier.

**The Four Causes of Change.** Further inspection of the situation reveals that all change and motion involve four factors or causes. There must be (1) something to be moved (a *material cause*), (2) something to move it (an *efficient cause*), (3) a line of development (a *formal cause*) and (4) a goal at which the movement is aimed, and towards which its line of movement proceeds (a *final cause*). To produce a work of art like a statue, for example, there must be (1) bronze, (2) a sculptor, (3) a form envisaged by the sculptor, and (4) a purpose to enact and embody that form. Again animal reproduction requires (1) material for the embryo (provided in Aristotle’s opinion by the female), (2) the male seed to set the process of gestation going, (3) a pattern or form for the process to follow, and (4) an aim or purpose,

<sup>5</sup> For Aristotle on this point, cf. *Met.*, VII, 17; VIII, 6; *Phys.*, II, 2.

<sup>6</sup> *Met.*, XI, 9; *Phys.*, III, 1; VIII, 1.

latent in the process, to breed true to the form in question, and produce offspring of the same species as the parent. Finally, the same four causes are present in mere mechanical motion. There must be (1) a body to move, (2) something to set it in motion, (3) a trajectory for it to follow, and (4) an inclination or purpose in the body to follow it, instead of going off at a tangent.<sup>7</sup>

We may, however, at once rule out the *material cause*, so far as the source of change and movement is concerned. A moment's reflection shows us that the Potential is without power to actualize itself or determine the Forms in which it shall be actualized. Earth cannot become grass by itself, nor could it become grass unless there were such a thing as the Form of grass for it to assume. Nor does it contain within itself the reason why it now becomes grass and now a tree. The cause, then, of any given change or movement is to be found in the *final-formal-efficient cause*.

**The Priority of the Actual.** This at first looks somewhat startling. It implies that the later, more actualized and formulated stages of any process are somehow prior to its earlier, less formulated and less actualized ones. The statue is prior to the bronze of which it is cast, the man is prior to the child that is to become him. But, after all, the plan or Form of the completed object must somehow be really present from the beginning in the process of which it is, relatively speaking, the end, causing the process to take place and guiding it in the direction of the plan or Form in question. Otherwise, there would be nothing to set any particular process going or to prevent change and motion from going every which way.

Even supposing, for example, that bronze could set about casting itself of its own initiative, it might just as well become a bowl or a candlestick, as far as it is concerned, as a statue. And if an animal embryo is to develop into one species of animal rather than another, the Form and Actuality of that species must be present in the process of gestation from the outset, molding the foetus into the kind of animal it is to become. Even in the movement of an arrow as it leaves the bow, the target must be in a sense present to give aim and direction to its flight. Causally, then, the Actual must be prior to the Potential. To describe the Form and Actuality of an object in their role of the cause of their own self-realization, Aristotle coins the word "entelechy," probably derived from the Greek word for "to be absolute" or "finished."<sup>8</sup>

<sup>7</sup> Cf. *Met.*, V, 2, 1013 a 25-1014 a 25; *Phys.*, II, 7, 198 a 14-198 b 5.

<sup>8</sup> Cf. *Met.*, IX, 8; *Phys.*, II, 8.



## VI. THE FIRST CAUSE OF MOTION

The existence of all this change and motion in the universe calls for some final explanation. To be sure, the fact that there is a universe and that it exhibits the general structure and specific Forms it does, need not be accounted for. It is a fact that we have to accept as ultimate and behind which we cannot and need not go. The universe, then, must be regarded as uncreated and eternal. It never began and it will never end, and from everlasting to everlasting its formal structure is the same. Aristotle had come, we may remember, to this conclusion, when, as a young man he wrote the dialogue *On Philosophy*, and he found no reason to change his opinion on this point as his system developed. But the fact that the universe exhibits not only an eternal fixed formal structure but also an everlasting process of constant movement and change and passage from one Form to another could not be taken for granted. For that a Cause had to be found.

There must, then, be a First Cause of Motion, and it now becomes our business to discover what its nature is and how it keeps the world on the go.

**The Nature of a First Cause.** Some light has already been thrown on the nature of a First Cause by the reduction of the four factors present in all change to two, and by the discovery that it is the factor of Form and Actuality which initiates and directs movement of every sort. Plainly, then, a First Cause of Motion must be a completely actualized, formulated substance standing in the same relation to the world-process as a whole as any particular final-formal-efficient cause within the process stands to the particular change of which it is the immediate source. Furthermore, it is equally plain that a First Cause of Motion cannot itself be subject to change or movement of any sort. For if it were, its motion and alteration would have to be explained, and it would then be not a First Cause but in part an effect.

It follows that a First Cause cannot be a Form of existence that either depends for its actualization upon potentialities provided by other substances, or that itself provides Matter which it takes Forms other than its own to actualize. For actualization is a process—is a movement and change from what is relatively Matter and Potentiality towards what is relatively Actuality and Form. The original source of all change can take no part in, and must have no contact with, the movement and alteration it originates. It must be self-existent, self-sustaining, and self-explaining. And to be this, it must actualize only

its own potentialities and actualize them in a Form that is not Matter for anything else. Only so can it be, to use Aristotle's own phrase, an "Unmoved Mover" imparting motion without participating in it.

The existence of such a substance, Aristotle feels, is not inconsistent with his assertion that in the universe we never find Matter without Form or Form without Matter. Pure Actuality is not Form without Matter in the sense of being empty Form. On the contrary, it is a concrete individual thing, in which Form and Matter, the Actual and the Potential, have completely coincided and been indistinguishable from one another from all eternity.

#### VII. THE LOGICAL NECESSITY OF PURE ACTUALITY

**The Pyramidal Structure of the Universe.** Apart from the necessity of assuming such a substance to account for change and motion, its existence is logically implied in the plan of the Aristotelian universe, which would lack logical conclusion without it. The universe, we can now see, rises in successive tiers or platforms of being, each one of which is characterized by a decrease of unrealized Potentiality and unformulated Matter, and by an increase of actualized Form, relatively to the tier on which it rests.

At its base we have five primitive formulations of Prime Matter—the physical elements of earth, water, air, and fire; to which Aristotle adds a fifth, the ether, partly to guard against a too great preponderance of fire in the universe, and partly because the exalted and semi-divine nature of the heavenly bodies seemed to demand a finer substance than the grosser stuffs of which earthly things are compounded. The diffuse potentialities of the four elements are given further actualization by the Forms of the terrestrial physical substances composed of them; the potentialities of the ether are realized in the movement of the heavenly bodies.

**The Successive "Set-Backs" to a Necessary Apex.** From the extended and variegated platform of the terrestrial physical substances rises, with considerable set-back, a smaller platform of organic bodies which actualize the potentialities of life possessed by certain combinations of physical matter; and from this again a still smaller platform actualizing the capacity some organic and living matter has for becoming sentient and conscious. Finally, at least one sentient living physical substance possesses potentialities of which thinking is the actualization. This substance is man, whose mind expresses the maximum of actualized Form and the minimum of unrealized Potentiality

and Matter that a physical substance can attain. Thus the human mind stands at the end of a series of actualizations, each one of which is made possible by the level below it, and makes possible the level above it. For, in the sensible world at least, only physical bodies can live, only living physical bodies can be conscious, and only conscious living physical bodies can think.

This pyramidal convergence of the universe from a base of unformed Matter and unrealized possibilities towards completely realized and specific Form can come to a point and a logical conclusion only in a substance from which all unrealized Potentiality has disappeared, and which is, therefore, pure Actuality and Form containing no residue of Matter whatsoever. Without such an apex the formal structure of the universe would be decapitated and unfinished. The demands of logic, then, coincide with those of dynamics. What fulfills the one, answers the requirements of the other.

#### VIII. THE UNMOVED MOVER AND MOTION

**An Unmoved Mover Cannot Exert Force or Volition.** We have now laid down certain general specifications to which the nature of an Unmoved Mover must conform. But in so doing, we have gained little information as to what a substance complying with these specifications would be like, and hence are far from having discovered the nature of the First Cause. Moreover, what little we have discovered greatly complicates the question of how motion itself is imparted to the universe by the Unmoved Mover. Obviously, it cannot be imparted by any exertion of energy or even exercise of volition on the part of the First Cause. For an outflow of energy or power implies that its source is bestirring itself and is therefore in process and movement, and volition is a process of satisfying a desire and realizing an end. Hence both the application of power and the expression of will have to be ruled out as methods of causing motion, since both involve a passage from the Potential to the Actual, and are therefore characteristic of a moved mover—that is, of a link in the chain of cause and effect—rather than of an Unmoved Mover and a First Cause.

We still have, then, our two original questions on our hands, though they have now become more specific. We have first to look the universe over more thoroughly to see if we can anywhere find anything that in any way measures up to pure Form and Actuality. To be sure, we can be pretty certain that the substance we are seeking will not be

found within the universe itself, since the human mind, in which all the potentialities of Matter are realized to the highest possible extent, still needs a body to keep it going and an external world to give it something to think about. Nevertheless, it may be that within the universe we shall find hints as to the nature of the Unmoved Mover. And we may also perhaps find there suggestions as to how such a Mover can impart motion without doing violence to its own nature. Let us, then, rapidly review Aristotle's physics, biology, and psychology.

#### IX. PHYSICS AND ASTRONOMY

Physical bodies, as we have already seen, are simply one form of Matter in the wide sense of the word in which Aristotle uses it. But the four, or rather the five, physical elements out of which all bodies are made are the first and fundamental actualizations of the potential, without which further actualization would be impossible and upon which it is based. Were there no physical bodies to move and change, live, feel, and think, there would be no activity, no life, no sentience, no thought in the universe.

**Space and Time.** The distinguishing characteristics of physical or corporeal matter would seem to be its possession of *position* or *place*—in a word, its occupation of *space*. Every body occupies a place, which is defined relatively to its nearest stationary surroundings. Hence the universe, which has no surroundings, cannot be conceived as in space. On the contrary, space is in it. Nor can there be such a thing as the empty space or void preached by Leucippus and Democritus. For, apart from the bodies occupying it, space is nothing. Nor again can space or body be infinite, since such a concept involves us in innumerable difficulties and paradoxes. Space, therefore, must be finite and, for reasons connected with Aristotle's astronomy, spherical.<sup>9</sup>

Time, the Siamese-twin of space, is united to it by motion. Space is a prerequisite of motion, and motion implies time. All passage from place to place is also passage from moment to moment. The points in a body's trajectory that lie spatially to the *fore* of it, lie also *before* it in time; those that are spatially aft are also temporally *behind* it. Time measures out the beat, the *now, now, now*, the *one, two, three*, involved in the sense of transition. According as we can count more or less of these beats in passing from one place or state to another,

<sup>9</sup> For Aristotle's discussion of space and time, cf. *Phys.*, IV.

movement is slower or faster. *Time*, then, says Aristotle, is *the measure*, or "*number of motion in respect of the 'before' and 'after.'*"<sup>10</sup>

**The Three Kinds of Motion.** There are three kinds of motion—rectilinear and circular movement and the motion resulting from their combination. Rectilinear movement is the motion native to the four elements. Since it cannot return upon itself, it must have a definite and separate starting-point and end, and cannot be continuous, as circular movement can. Furthermore, unlike rotation, it cannot be self-starting, self-perpetuating, and everlasting. In obedience to their native rectilinear motion, earth and water tend straight towards the center, air and fire straight towards the circumference of the terrestrial sphere. Hence our distinctions of up and down, high and low, light and heavy and the like. Their tendencies, however, are interfered with by the influence of the movements of the heavenly bodies, and notably of the sun, which keep earthly elements mixed and earthly affairs muddled by seasons, climate, weather, and the processes of generation and decay.

Circular motion is the natural movement of the fifth element, the ether, of which the heavenly bodies are composed. When undisturbed, its direction and rate are uniform, and, since it involves no displacement of its center, in a certain sense it involves no change of place. It is, therefore, free from any possibility of alteration in its quality, like slowing down or halting. Its only taint of potentiality lies in its possession of the capacity for "whence" and "whither"; that is, for the change of place involved in revolution about a fixed point.

**Astronomy.** Holding, as he did, to a geocentric astronomy, and convinced, as he was, that the heavenly bodies, being composed of ether, moved in circles, Aristotle found himself confronted with the necessity of explaining the observed aberrations in the orbits of the planets and the sun's ecliptic. This difficulty he dealt with by adapting the theory of *component motions*, proposed by his fellow-pupil at the Academy, Eudoxus of Cnidus, and amplified by the astronomer, Calippus. To make a long story short, he thought the universe to be a nest of hollow etheric or "crystalline" spheres, fitted one inside the other. Each sphere was not only carried in the revolution of its container, but also possessed a circular motion of its own, oblique to the container's movement, much as a revolving hoop may also be rotated sideways upon its axis. In certain of these spheres, the planets, the

<sup>10</sup> *Phys.*, IV, 11, 220 a, ll. 24-25. The italics are mine. The translations of Aristotle are all taken from the Oxford translation of his works.

sun, and the moon were embedded, and the outermost globe was studded with the fixed stars.

The component motions of fifty-five such spheres were necessary, in Aristotle's opinion, to explain the apparent eccentricity of the planetary, solar and lunar orbits, and to account for their divergence both from one another and from the all-inclusive rotation of the outer heaven in which they were carried. This system, in the final shape given to it by the Alexandrian scientist, Ptolemy, persisted for nearly two thousand years till Galileo and Copernicus established the revolution of the earth about the sun and its rotation upon its own axis, and Kepler early in the seventeenth century showed that the planets, including now the earth, move not in circles but in ellipses.

**No Unmoved Mover on the Inorganic Level.** Plainly, however, pure Actuality and the Unmoved Mover are not lurking anywhere on the inorganic level of the universe. All terrestrial substances are thoroughly infected with Potentiality. The ether, to be sure, freed from all possibility of qualitative changes or generation and dissolution, and naturally endowed with a self-repetitive activity of circular motion to which no beginning or end in space or time can be set, comes very near to filling the bill. But it is disqualified by its capacity for movement. Let us, then, explore the level of organic matter and see what we can find there.

#### X. BIOLOGY. THE VEGETATIVE SOUL

**The Nature of the Soul and Its Relation to Organic Bodies.** Aristotle's chief interest lay in biology, and it is in that field that he chiefly shone. Indeed, he ranks as one of the great biologists of all time. The transition from inorganic to organic bodies, he tells us, is marked by the appearance of *soul*, which is an actualization of capacities provided by certain combinations of the four elements in conjunction with pneuma, or "breath," akin to the ether and the carrier of life in the sperm. In Aristotle's own words soul is "the first actuality [entelechy] of a natural body furnished with organs."<sup>11</sup> Its relation to the body may be likened to that of cutting to the ax or of vision to the eye. Without the body it could not exist. And just as it is in its entirety dependent upon the body, so our various emotional and mental states are forms and actualizations for which different bodily states afford the stuff and potentiality. This dependence of the soul upon the body for its existence does not, however, mean that the

<sup>11</sup> *De Anima*, II, I, 412 b.

soul is a physical substance, as Democritus maintained, or yet that it is a state of the body like the harmony of the Pythagoreans. It is the actuality of an organic body, and forms with it a single, indivisible living creature, just as wax and the form into which it is molded make up a single indivisible object.

The capacities of soul are not actualized all at once, but progressively in three steps. First appear living bodies, then sentient living bodies, and finally both sentient and intelligent animate bodies. Common to all organic forms of Matter is the power of self-development and self-direction. The most primitive expressions of this power, common to vegetables and animals alike, are the functions of nutrition and reproduction. These constitute what Aristotle calls the *vegetative soul*.

The vegetative soul makes possible the appearance of a new activity, *sensation*. Bodies must live before they can perceive and feel. The vegetative soul is therefore the Potentiality, or Matter, of which the *sensitive soul*, as Aristotle calls it, is the Form and Actuality. It is the addition of sensation in its various forms that raises animal above purely vegetable life. The difference between the sensitive and the vegetative soul is signaled by an important difference in their relations to the external world. Nutrition extracts and assimilates the *Matter* from external objects, but spits out the Form, whereas sensation takes over their *Form* without their *Matter*.

**Extent of Aristotle's Biological Research.** Aristotle's researches into the distinctive structures and functions of organic matter are so extensive, observant, and exhaustive that we have not the space to follow them even in their main lines.<sup>12</sup> Suffice it to say that he was acquainted with five hundred or more different species of animals, had dissected and investigated in detail some fifty kinds ranging over the whole animal kingdom, and, besides many conclusions that now appear primitive and fanciful, had drawn others that have stood the test of time or at least command the admiration of modern biologists. Among these we may mention his insistence that whales are mammals; his descriptions of the mechanism of locomotion, of the process of digestion in ruminants, and of the habits of bees; his discussion of the mechanism of animal reproduction; his exposition of analogous structures in living bodies; and the methods of biological classification he proposed.

<sup>12</sup> Aristotle's chief works on biology are the *Historia Animalium*, *De Partibus Animalium*, *De Motu Animalium*, *De Incessu Animalium*, and *De Generatione Animalium*.

## XI. PSYCHOLOGY. THE SENSITIVE SOUL

**The Nature of Sensation.** The same thoroughness and brilliance characterize Aristotle's investigation of the sensitive level of the soul, which raises animals above plants.<sup>13</sup> The distinctive mark of sensation lies, we may remember, in its power to absorb the qualities and Forms of things without ingesting their Matter; in much the same way, Aristotle remarks, that wax takes the seal of a signet-ring without absorbing the metal of which the ring is made. Sensation, however, is not a passive reception of impressions from without. It is a process of actualizing complementary potentialities resident both in the perceiving sense-organ and the thing perceived. For example, when the eye is shut, color is present only potentially in the external object. But the moment one has one's eye on the object, it becomes colored.

This double actualization, which involves a reciprocal action of the organ upon the object and the object upon the organ, takes place in all perception. And it is the actual imbuing of the percipient with the quality perceived that constitutes perception. Thus, the sensation red is the actual reddening of the eye that occurs in the act of seeing a red object. When the sense-organ is turned off, the perceived quality lapses from an actual to a potential state in both the perceiving and the perceived body. But in the perceiving body traces of the actualized condition linger on as actual memories and images.

**The Different Senses and Sense-Organs.** The basic sense, which all animals possess, is touch. It absorbs primarily the properties common to all bodies. The other senses specialize, and are important in proportion to the thoroughness with which they suck from objects the Forms and qualities to which they are sensitive. The most important perceptual activity is sight, though hearing is a more indispensable condition for thinking than vision is.

In order to actualize in themselves so many different and even opposite forms, the sense-organs must be composed of a simple, neutral material, actually none of the qualities they assume, but potentially all of them; inclined, moreover, to no one more than to another, but occupying a mid-way position with respect to them.

Perception is never in direct contact with its object. It always sucks in the qualities of the external world through a straw, as it were—the ear through the air, the eye through a luminous medium existing both in water and in the atmosphere, smell through moisture.

<sup>13</sup> For Aristotle's psychology, cf. the *De Anima* and the *Parva Naturalia*.



Even taste and touch are only transmitted by the tongue and the skin to the heart where the sensations actually occur.

**The Common Sense.** Now, our different senses intercommunicate. Although actualized by different organs in different parts of the body, they refer to the same object and give us not five external worlds but one. In short, our senses experience a wide range of what Aristotle calls "common sensibles."

In dealing with these "common sensibles," however, we come across contradictions and fall into error. A cavity in a tooth that feels big, may look small. Yet the separate reports of the senses never lie. They are what they are. The cavity actually does *look* small and *feel* big.

To explain all these phenomena, as well as the fact that in sleep all our senses lapse into unconsciousness together, Aristotle supposes that over and above the five senses there is a "common sense," resident in the heart, which operates through the different organs of perception, and organizes and unifies, sometimes erroneously, their reports. The existence of such a sense is also necessary to account for self-consciousness. For, although perceptions are actualized in the particular sense-organ, our further awareness that we perceive cannot be located there. The eye sees. But it is not conscious that it sees. All that it is conscious of is sights. Nor is our awareness that we are seeing or hearing, a *seeing* that we see, or a *hearing* that we hear. The consciousness then of seeing, and hearing, which accompanies our consciousness of sights and sounds, cannot be located in our eyes and ears, in so far as they are exercising their specific functions of vision and hearing. It can be located in them, if at all, only in so far as they may be also exercising an additional function of perception in general whose real seat is elsewhere.

**Imagination and Memory.** The sensible qualities actualized in the sense-organs at the moment of perception linger on, as we have seen, after the perception is over, as images and memories. Most of these memories exist only potentially and are merely actualized or recovered from time to time, often at random, without apparent rhyme or reason, but sometimes deliberately and with conscious effort. In dreams these images, cut loose from their sources, are mistaken for present experiences; but our ability when we are awake to trace the image *back* to the sensible impression responsible for it, makes it a *memory* of the *past*. This sense of the past and, generally, of time is, Aristotle thinks, the work of the "common sense." When we try to remember, deliberately and for a purpose, we have *recollections*. But even our seemingly haphazard trains of memories and daydreams are often guided

by certain laws of association, such as contrast or similarity, or contiguity in space or time.

**Behavior of Organisms.** We pass now to the motor aspects of consciousness, or, as we might say, to the behavior of the organism. Living bodies are self-moving and self-directing. Moreover, their movements are not random, but definitely motivated. This motivation is supplied by sensation, which is not neutral, but pleasurable or painful, and therefore an incentive to behavior. Just as the organism of its own nature lives and feels, so of its own nature it feels pleasure and pain and instinctively likes and seeks the one and dislikes and shuns the other, whether they are presented in immediate experience or in image and memory. The consciousness of liking and seeking a thing is *desire* for a thing. The desirability of a thing naturally inspires movement towards it and *vice versa*. The organic counterpart of its desirability is purposive movement directed towards it. Without desire to motivate it, motion would be purposeless.

Desire is the offspring of the sensitive activities of the soul, and is particularly bound up with imagination. But the images of fulfilled desire, and therefore the purposes of the organism, do not all move on the same level. Some, indeed, anticipate the pleasures connected with the physical activities of the body, and constitute our appetites. But some may also commend themselves to reason more than others, and thus constitute an ascending series of objects of rational wish—or of what is good for us in the long run rather than pleasurable at the moment.

**No Unmoved Mover on the Vegetative or Sensitive Levels.** Obviously, a wholly actual, Unmoved Mover is no more to be discovered among living, feeling, and desiring substances than among inorganic ones. For all such substances actualize potentialities provided by lower stages of existence, and in their actual form possess capacities requiring higher forms of being to bring to full fruition. At the same time, the vegetative and sensitive levels of the soul have important implications for metaphysics. In organisms the priority of the Actual and the dominance of the final cause, obscurely indicated by the behavior of inorganic bodies, are plainly displayed. The explanation of organic structure, Aristotle feels, lies in the functions it performs. The eye exists and is fashioned as it is *in order to see*, the ear *in order to hear*, the animal body as a whole *in order to live* and to perpetuate its species. Everywhere, then, process is caused, not by antecedent events, but by subsequent ones, and finds its real reason in its result.

**Teleological Character of Nature.** In short, on the organic level, the

end to be realized—the prior Actual and the final cause—is everywhere visibly originating and directing the movement leading towards it. In this respect, living processes are but striking samples of the universal operations of nature. The rectilinear motions of the four elements, their tendencies to return, each to its appointed place, and the revolutions of the celestial spheres are really just as purposive and just as teleological in character as the animal functions of nutrition and reproduction are. They are strivings towards an end, and their why and wherefore can be found only by discovering what that end is.

So, too, with all the levels of the universe. The lower exist *for the purpose* of giving rise and support to the higher. The end, then, we might say, of the whole world-process, and the reason for it, is the creation of intelligence, and all the lower stages are but means to carrying out this final purpose fulfilled in human beings.

Perhaps, here, we should speak a word of warning. The Aristotelian world-process, though evolutionary in the sense that it exhibits a ladder of Forms culminating in man, is not an evolution in time. The higher Forms are not produced *after* the lower. The human level is not *later* than the inorganic level. All the stages, superimposed upon each other in due order, have existed together from all eternity—the universe just as it is, ever was and ever shall be, world without end. The process of evolution lies simply in the constant ascending movement from the potential to the actual involved in the support and nourishment of the higher levels of existence by the lower.

The general purposive, upward thrust of the world-process is broken by checks and distortions. Factors of “necessity” and absolute chance, apparently bound up, in Aristotle’s opinion, with the taint of potentiality, make nature’s aims sometimes fly wide of their marks and mar and thwart the realization of her purposes. In this way all the malformations, deformations, failures, and other apparent contra-indications of purpose that occur in natural processes are accounted for.

**A Mover Can Attract Without Itself Being Moved.** The sensitive soul, all in all, shows us how the prior actual can instigate the process of realization in the potential, how purpose can actuate nature, and how motion can be caused by an Unmoved Mover. Plainly the actual, being *ahead* of the movement that actualizes it, cannot push it into being *from behind*, and plainly an Unmoved Mover, as we have seen, cannot exert effort or even volition in setting things going. But *the object of desire* lies not behind but ahead of the movement pursuing it, and, nevertheless, causes the various means and successive stages of attaining it. Furthermore, in causing them it puts forth no force.

Nor does it *will* the pursuit of itself to take place. It may be even quite oblivious to the fact that the pursuit is taking place. May not, then, this desirability be the secret of the prior Actual's power to actualize the Potential, and of Form to inspire and guide its realization by Matter? Indeed, why should not some supreme object of the world's desire cause, just by its attraction, the heavenly spheres to turn round and round in a kind of cosmic lovesickness? In any case, we can now explain how a First Cause that neither pushes, nor pulls, nor wills, nor anywhere or in any way is in contact with its effect, can still produce it.

## XII. EPISTEMOLOGY. THE RATIONAL SOUL

We pass now to the activity of rational thought,<sup>14</sup> exercised by man alone of all the animals, in our search for the Unmoved Mover. Here, too, there is the same gradual transition from animal to specifically human consciousness that marks the passage from the organic to the inorganic and from vegetable to distinctively animal life. The child begins on the "sensitive" stage and develops reason only as it grows older, and many of the higher animals are capable of a limited degree of intelligence.

Again, just as sensation extracts their sensible qualities from things, so reason absorbs their abstract, intelligible Forms. And just as the sense-organ is potentially all the qualities it can become in the process of perceiving, so the intellect is potentially inscribed with all the Forms that can be actualized in the process of knowledge, much as space is potentially inscribed with all geometrical figures. Since reason is capable of grasping *any* truth, it is therefore potentially *all* truth—i.e., the whole system of intelligible Forms that constitute the structure of the universe.

**Error.** The Forms are actualized by the intellect, not bit by bit, but all at once, in their entirety, in a single instant of time. They "flash" upon us, as we say, all complete. Nor can there be any more doubt or error with respect to what Form we are thinking at the moment than there is with respect to what sensation we are experiencing. Unfortunately, however, all the Forms are not actualized together by the intellect, or interlocked like the pieces of a wholly, or of even a partially, completed picture-puzzle. They are rather poured into the

<sup>14</sup> For Aristotle's account of the activities of the rational soul and his discussion of the potential and the active intellect cf. *De Anima*, III.

mind as the pieces of the puzzle are dumped upon the table, disconnected and in confusion. The intellect has the task of fitting them together and solving the puzzle they present. This task is called *synthetic judgment* or *thought*, as contrasted with *analytic judgment* which lies in simply stating that each different Form is what it is. "Man is human" or "a cow is a cow" are examples of analytic judgments, "man is an animal," or "cows chew cud," of synthetic ones.

It is in fitting different Forms together, and in suggesting how perhaps they may be related and where they may belong in the puzzle, that error arises. Liability to mistakes is increased by the fact that all Forms given to the mind are stuffed with sensible content, and that we cannot think without images. For sensible objects, being infected with potentiality, *need* not be what they are, and do not indicate precisely what their true natures or Forms are. It is very difficult, for example, to know whether certain Forms of life are animal or vegetable. Time, too, complicates the problem, since it transforms our picture-puzzle into a sort of kaleidoscope, and forces us to figure out, not merely how Forms *are* related here and now, but how they once *were*, and how in the future they *will be* connected.

**The Unmoved Mover Not a Being that Reasons.** Human reasoning, then, is a *process*, a means towards an end, an actualization of the Potential; not an end in itself containing its own reward. Not only does it depend upon the body for its existence, and need images provided by the sensitive soul to help nourish and sustain it, but it is actualized by "flashes" of insight that seem to come from a higher level of being. It is not, then, the pure actuality and Unmoved Mover of our search.

At the same time there are signs that we are now hot on the scent and have almost cornered our quarry. In the first place, in contrast to sensation, thought, Aristotle believes, has no specific physical basis. There must, to be sure, be a physical organism before human thinking can occur, but reason is not an actualization of bodily capacities in the sense that sight, hearing, etc., are. *Its potentialities lie within itself*, and, unlike other potentialities, do not imply a Matter different from itself, but merely the *absence* of its own activity. For example, break up a statue and you have still on your hands the bronze or marble of which it is composed. But banish a concept from your mind, and you have nothing on your hands except the blank possibility of thinking of it again.

**Identity of Actual and Possible Concepts.** In short, a concept when it lapses from the actual to the potential state does not relapse into

another stuff, as the statue does. So, too, in becoming actual a concept does not change its nature and name, as bronze does when it becomes a statue. It remains the same concept, whether it is actually present or only latent in the mind. In other words, *the potential and the actual reason are not two things but one*. Or as Aristotle puts it, the intellect "is nothing at all before it thinks."<sup>15</sup>

Again, when the intellect does think, it is nothing at all actually except *what* it thinks. It has no Form of its own in addition to and different from the Forms it entertains. There is nothing to the mind apart from its intelligible content. Remove that content, and thinking itself has ceased. "For," says Aristotle, "where the objects are immaterial," as intelligible Forms are, "that which thinks and that which is thought are identical." (Speculative knowledge and its object are identical.)<sup>16</sup>

**Meaning of the Potential Intellect.** The *potential intellect* means, then, simply that we are not able to retain our grasp upon the Forms that constitute our thinking, but are subject to long intervals when they are not actually apprehended. In these intervals they are merely knowable, and as such become objects to be sought for and reasoned out. For Potentiality implies the possibility of not thinking as well as thinking, of thinking more or less accurately, and of thinking this rather than that. Hence truth can never be wholly or continuously present to the human organism, and the flashes in which it is revealed to us must necessarily be flickering, intermittent and partial.

A second point to be noted is this. In contrast to the sensitive and vegetative activities, and, for that matter, to the processes of discursive reasoning and the potential intellect, all of which are parceled out among different organisms, the flashes of insight in which reason is actualized are super-individual in character. When you and I *perceive* one and the same object, *two* bodies are active, and *two* pairs of eyes duplicate its qualities in the act of perceiving it. But when you and I *conceive* what an object is, there are not two Forms, or natures, of the object, one in your mind, the other in mine. The same identical form flashes upon us both.

**Truth Enters the Mind from Above.** Nay more, since thinking and what is thought are identical, in one and the same super-individual act of thinking the Form in question is present in both our organisms, actualizing our two processes of discursive reasoning and turning what is knowledge to both of us into what is true and intelligible in

<sup>15</sup> *De Anima*, III, 4, 429, l. 24.

<sup>16</sup> *De Anima*, *loc. cit.*, 22 ff.

itself, independent of us both. Though you and I may work out a problem independently, the solution, when it occurs to us, is one and the same in us both. It is therefore not thought by us severally, but thinks itself in us universally. And, unlike all other actualizations of the Potential, it comes not as a *transformation* of an alien subject matter, partially actualized on the lower levels of nature, but as a kind of "supernatural" burst of *information* from above.

### XIII. THE ACTIVE REASON

**Identity of Thought and Truth in the Active Reason.** Our inspection of human reason, then, suggests the existence of a still higher Form and activity of being—an activity of intellect which is one with and nothing but the whole truth about the universe. By this supreme act of thought the entire system of Forms constitutes itself the intelligible structure of the world. This activity floats free of all material conditions and supports. It is self-existent and self-sustaining. The truth, the intelligible structure of things, is still there and is still rational, whether *we* think it or not. But by her higher actualizations of the potential, nature has prepared, in the intellect of man, a place for it which it may inhabit now and then for a brief moment, and reveal there the truth for which the potential, distinctively *human* intellect is an unremitting search.

In what Aristotle now calls the *Active Reason*, we have also all that is immortal in man. On this point he is specific. The potential, or *passive reason*, he tells us, can no more exist without the body than loving and hating, memory, imagination, sensation and life can. Hence it disappears along with them when the body returns to dust. The Active Reason alone is separable from the body, immortal and eternal. But in that timeless, deathless, all-comprehending act of thought there is nothing of *us*. It is impersonal in its essence, and, even while we live, so far as it succeeds in entering into us it abolishes our personalities and separate individualities, and merges our minds in a single registration of the one and only truth. Its survival of our death has nothing of personal immortality about it. In surviving our bodies it survives *us* also. For all that makes you, you, and me, me, is bound up with our emotions and feelings, our images, perceptions, and organic structures. It is to them that we are bound, so far as we are *we* and have separate personalities, and we share their mortality and meet their fate. Only the apprehension of truth, of which we were for a brief space the fragile and ephemeral receptacles, defies our passing,

and, heedless of our destruction, continues throughout all eternity to enlighten the minds of successive generations of men.

**The Active Reason an Unmoved Mover.** At last, in this *Active Reason*, contrasted by Aristotle with the distinctively human, *passive* intellect, we have a form of being that fulfills all the specifications laid down for pure Actuality and the Unmoved Mover. For the Active Reason neither is produced out of anything lower than itself nor produces anything higher than itself. It depends upon nothing outside itself for either its existence or its completion. Nothing else is capable of becoming it, and it is capable of becoming nothing else. In it the distinction between the Potential and the Actual has been from all eternity abolished and meaningless. It is therefore pure Actuality.

The Unmoved Mover, then, can only be found in this activity. Moreover, inspection of the universe shows us that the Active Reason actually is the supreme object of the world's desire. All nature aspires towards man and aims at his production, and all the activities of man, Aristotle feels, are subordinated to, and have as their indirect or direct goal, the exercise of the intellect in and for itself, or, in other words, the attainment of the vision of truth. Hence this exercise and this attainment are at once the climax and the driving power of the world-process. By the sheer attraction of its finished and perfect Form the Active Reason lifts the whole universe towards itself, with no expenditure of energy and without occurrence of change or movement within it. Love of its perfect activity makes the world go round, and the successive actualizations of the Potential proceed onward and upward forever in a ceaseless effort to compass and possess the beloved.

#### XIV. THEOLOGY

**The Active Reason and God.** Whether the Active Reason can without further refinement qualify for Godhead is, however, a disputed point. Aristotle's pupil, Eudemus, and many later commentators, both ancient and modern, believed it could. Their views receive some support from a passage in the *Metaphysics* stating that the universe, like an army, has its good both outside and inside itself; outside, in the person of a commander, inside, in its discipline and order. This might be taken to imply that God in one aspect, at least, is the whole intelligible structure of the world, or the content of the Active Reason. Still, Aristotle insists that the transcendent aspect of God is more important than the immanent. And the identification of the Active Reason with the divine mind would suggest that, when it enlightens our



intellects with its flashes of insight and unites them with the truth, it actually merges and makes us one with the divine essence. But Aristotle explicitly declares that, wonderful as these flashes are, they are only somewhat *like* the life of God, which is a state of existence still more wonderful.

Again, the content of the Active Reason, being the whole system of Forms which constitutes the intelligible framework of the universe, is a multiple content, in which degrees of higher and lower also exist. God, on the other hand, can have as the object of his thought nothing higher or lower than himself. He can have nothing higher because such an object does not exist. He can have nothing lower because such an object would be unworthy of his thought. Moreover, since "that which thinks and that which is thought are identical," he would be identified with something other and less perfect than himself—which is absurd. Hence God can think and be only his own Form. And that Form must be simply the nature of the activity of thinking in itself, distilled clear of the Forms that diversify it. In God, Aristotle concludes, "it must be itself that thought thinks (since it is the most excellent of all things) and its thinking is thinking on thinking."<sup>17</sup> In short, God would seem to be a special and the most perfect instance of the activity of the Active Reason.

However this may be, the Aristotelian God does not seem to be a personal deity. He has no love, no hate, no will, no aim, no moral qualities or activities. Indeed, in another place Aristotle expressly declares that he is not a moral being in the sense, at least, of possessing and practicing the moral and social virtues.<sup>18</sup> For that matter he cannot even so much as know that the universe, or that anything besides him, exists, so completely confined is he by his perfection to meditation upon himself.

**Relation of the Active Reason to God.** Now, if the Active Reason is not God, the question arises of its relation to him. Here we have another obscure and disputed point. One opinion is that Aristotle regarded it as mediating between the divine and human intellects—a supposition that led the Arabian commentator, Averrhoes, to suggest a whole hierarchy of intellectual levels culminating in the Active Reason, which link the mind of man with the divine intellect and enable us to attain to knowledge of God and union with him.

Again, we cannot but ask what meaning or content we can ascribe to just "thinking about thinking." Thinking, we say, about thinking

<sup>17</sup> *Met.*, XII, 9, 1074 b, 32 ff.

<sup>18</sup> *Ethica Nic.*, X, 8. *Pol.*, I, 2, 1253 a, 28 ff.

*what?* St. Thomas Aquinas tried to answer this question by suggesting that whereas the human intellect knows itself incidentally to the knowing of its objects, the divine mind does just the reverse. God knows himself first in the pure act of "thinking about thinking" posited by Aristotle. But in "thinking about thinking" he thinks incidentally all that is thinkable, i.e., the whole intelligible structure of the universe. This suggestion has been followed by a number of scholars both modern and medieval. But it seems to be not so much a description of Aristotle's thought as an attempt to rescue him from the consequences of it.

**The Nature of God.** Aristotle, however, is not troubled by these difficulties. He has discovered to his own satisfaction the nature of the Unmoved Mover and pure Actuality that moves the world, "even as the beloved moves the lover, unmoved itself."<sup>19</sup> "On such a principle," he declares, "depend the heavens and the world of nature. And its life is such as the best we enjoy, and enjoy but for a short time. For it is ever in this state (which we cannot be). . . . If then God is always in that good state in which we sometimes are, this compels our wonder; and if in a better state, this compels it yet more. And God *is* in a better state. And life also belongs to God, for the actuality of thought is life, and God is that actuality; and God's essential actuality is life most good and eternal. We say therefore that God is a living being, eternal, most good, so that life and duration continuous and eternal belong to God; for this *is* God."<sup>20</sup>

**Astronomical Objections to Monotheism.** Still, there was one difficulty that did bother Aristotle. The failures to fulfill purpose and achieve Form, and the flagrant shortcomings of every sort that marked the upward and onward striving of the world-process, might be set down to the hesitancy, the indirection, and the tendency to incompleteness inherent in the nature of the Potential. The imperfection of all terrestrial life was thus easily accounted for. But the movements of the heavenly spheres exhibited a perplexing peculiarity for which Potentiality could not be held responsible. Their motions were all regular, uniform and unremitting throughout all time, and were perfect in every respect except for the potentiality of "whence" and "whither."

But—and here came the question—why were the inner spheres out of step with the procession of the fixed stars, and revolving every

<sup>19</sup> *Met.*, XII, 7, 1072 b.

<sup>20</sup> *Met.*, XII, 7, 1072 b, 12 ff.

which way with respect to it and to one another? Since this maze of oblique revolutions was without so much as a hint of imperfection—all circular movements being equally perfect irrespective of direction—it could not be laid at the door of Potentiality. Neither could it be derived from the outer heaven, which transmitted only the direction of its own revolution to the inner spheres; or directly from the Unmoved Mover, which could scarcely be expected to attract—or rather to distract—the fifty-five spheres in fifty-five different directions.

**One God, or Fifty-five Gods?** The only possible explanation of this sidereal situation was that each sphere must be in love with a different beloved and have its special Unmoved Mover, to which the particular direction, as well as the fact, of its revolution was due. In a word, there must be not one but fifty-five principles upon which “depend the heavens and the world of Nature,” fifty-five divine intellects engaged in “thinking about thinking,” fifty-five Gods of co-equal divinity and exactly alike in all respects.

Just how Aristotle tried to smooth things over, we do not know. His pupil Eudemus tells us that he accepted the fifty-four new additions and decided that there were as many First Causes of motion as there were spheres. And a modern scholar has suggested that, starting out as a monotheist, he finally came to see that a single source of movement was not sufficient to explain the running of the universe, and frankly adopted, in writings now lost, a polytheistic hypothesis.<sup>21</sup> His own last extant words on the subject are non-committal. In a late passage in the *Physics*, we find him merely asserting that there must be a First Cause of motion “whether the cause be one or more than one.”<sup>22</sup>

<sup>21</sup> Jaeger, *Aristotle*, pp. 379-380.

<sup>22</sup> *Phys.*, VIII, 6, 258 b, 10 ff.

## Chapter XIV

# ARISTOTLE (CONTINUED)

### I. LOGIC

**The Categories.** At the same time that Aristotle was reasoning out his conclusions regarding the nature of the universe, he was busy reflecting upon the character and validity of the mental processes by which he arrived at them. The results of these reflections have come down to us in his *Logic*, which is not only the first systematic work on the subject, but one of the great contributions to the philosophy of all time.<sup>1</sup> There is, he saw, a "grammar" governing correct thinking, which the grammar of language follows and expresses. Just as all the profusion of speech may be reduced to a limited number of "parts of speech," so all our reasoning makes use of eight or, at the most, of ten *categories*. These categories are: *substance, quantity, quality, relation, place, time, action, being acted upon or affected* and perhaps *state* and *position*. There is nothing we can think about that does not fall under one or another of these headings.

**Substance the Primary Category.** *Substance* is the fundamental category. Without it—without *things* to have quantity or quality or relation or to act or be acted upon—the others are meaningless. As we have already seen, it stands primarily for individual concrete objects, but it may be used in a secondary sense, of the smallest and closest *species* by which the individual is defined for the purpose of knowing *what* it is. Distinguishing marks of *substance* are that it is always a *subject*, never a *predicate*, and that it cannot be more or less itself or other than itself, although it may assume more or less of a given predicate and take on properties different from itself and contrary to one another. A man, for example, is never more or less a human being or other than one, but he may be black or white, more or less cold, and hot at one time, cold at another.

Into Aristotle's discussion of the other categories we need not enter. Suffice it to say that he feels that, since they are ultimate and un-

<sup>1</sup> Aristotle's logic or *Organon* comprises the *Prior* and *Posterior Analytics*, the *Topics*, the *Sophistici Elenchi*, the *Categories*, and the *De Interpretatione*.

analyzable, they present themselves to the mind with the same immediacy as sense perceptions do. We no more *judge* that a man is a substance, or that white is a quality, or that large is a quantity, than we *judge* that an apple is a sense-datum, or red or large. In the one case we just *know* it, in the other we just *perceive* it. Behind that knowledge, as behind that perception, we cannot go.

**Propositions and Predication.** When we talk and think, however, we join categories together in sentences and predicate one thing of another. And the truth or falsehood of our statements is largely a matter of asserting or denying predicates according as they are, or are not, in actual fact united with their subjects. Predicates, according to Aristotle, are of three sorts.

1. They may denote accidents, or, in other words, qualities of the subject that add little or nothing to our knowledge of what it really is—as when we say “man is hairy.”

2. Or they may denote properties which, although co-extensive with the species or genus to which the subject belongs and expressive of its true nature, are not ultimate definitions of that nature—as when we say “man talks.”

3. Finally they may denote the essential characteristics of a thing, which set it apart from all others and constitute its distinctive species—as when we say “man is rational.”

For example, man’s hairiness has nothing to do with his rationality; his ability to talk is expressive of and follows from his rationality; but his rationality expresses and depends upon nothing more profoundly human than itself, and is itself the final and distinctive characteristic, or essence, of human nature.

**Species and Genera.** From this final and distinctive characteristic, or *infima species*, as a center we may move out in a series of widening concentric circles towards the *summum genus*, or most general class within which the species falls. In the case of man the *summum genus* is the class of “living beings” in general. We have, however, to observe a given order in proceeding from the *infima species* to the *summum genus*, and *vice versa*, arranging the classes we predicate of the subject in such wise that each new predicate we apply modifies all the preceding predicates. We must, that is, be able to write our description with no commas separating the descriptive adjectives.

For instance, man is distinguished from other living beings, by his two-footed, viviparous, rational, and mammalian characteristics, and loosely speaking we may and do predicate these properties of him in any order we choose. But to give an accurate and scientific description

of him we must invest him with them in the order in which the different classes predicated of him enclose one another, and must define him as a rational (kind of) two-footed (kind of) mammalian (kind of) viviparous (kind of) animal (kind of) living being. Any other order of arranging the descriptive adjectives would be incorrect. And the same order must be observed in reverse in passing from the *summum genus* of living beings in general to the *infima species* of a human living being.

**Definition.** As we thus enclose within one another in their proper order the classes that intervene between the *infima species* and the *summum genus*, we disentangle those characteristics of each successive class, "commensurate" with the class in question, or in other words, present in all its instances and differentiating it from all other species. In this wise the essential characteristic, or *differentia*, is distinguished not only from accidental qualities but from secondary though universal properties. The sum total of the *differentiae* of all the classes from the *infima species* to the *summum genus* inclusive gives us the complete definition of the object. For we have then discovered "the number of attributes that are severally of wider extent than the subject, but collectively co-extensive with it,"<sup>2</sup> or in other words, the precise number of qualities that though shared with other species, exist *together* only in the species in question.

Thus man, who is the only rational species of living beings, shares his two-footedness with the birds, his suckling of his young with the other mammals, his bringing forth his young alive not only with the mammals but with some snakes and fishes, and the characteristic of being alive with the vegetables as well as with the animals. But he alone combines all these properties. "Hence this synthesis must be the substance of the thing."<sup>3</sup>

Much loose thinking, Aristotle feels, comes from inattention to the difference between "essence," "accident," "property," "species," "genus" and the like, as well as from carelessness in distinguishing those qualities that are "commensurately universal" with a thing from those that are not. This results in our misunderstanding the true nature of things.

**Correct Inference.** To return, however, to the proposition. Even the simplest statement, which is that of a noun and a verb, leads us far afield and suggests new possibilities. Thus "man walks" makes us think of beings that are not men, and of actions that are not walking, and leads us to combine our four terms diagonally as well as directly,

<sup>2</sup> *An. Post.*, II, 7, 92 b, 32 ff.

<sup>3</sup> *Ibid.*, 90 a, 32 ff.

so that we get four possible suggestions. "Man or not-man walks or walks not."

If we add another qualification and say "man is not tall," our four propositions beget eight, since the "not" may imply either that he is actually *short*, the *contrary* of tall, or that he is merely middle-sized or hairy or something to which neither of the contrasts applies. In that case "not" indicates simply the *contradictory*, but not the *contrary* of tall. Furthermore, the proposition as it stands does not indicate beyond doubt whether we are using either subject or predicate in the sense of "some" or of "all." And when we try to see into what other propositions it can be correctly converted by reversing the subject and the predicate, and still more when we attempt by "opposition" to infer the falsity or the truth of the negative propositions implied in it, the double sense of "not," and the difference between "some" and "all" dig many a pitfall for us. Only by observing a complicated set of rules governing correct inference can we avoid falling into logical error.

**The Syllogism.** But our troubles are only beginning. We habitually join our statements by such words as "hence," and "therefore," and so run on from thought to thought, developing our argument and pursuing lines of reasoning. In so doing, however, we frequently make statements based upon long and complicated trains of thought and lines of reasoning from which, in making our final assertions, we have dropped, for the sake of brevity and convenience, the intermediate steps leading from the subject to the predicate. For example, if I assert that "Socrates is mortal," I have really argued as follows:—"Socrates is a man; all men are mortal; therefore Socrates is mortal." Otherwise I could not have asserted the predicate of the subject with any certainty.

But in stating my final conclusion, I have altogether suppressed the middle term "man" and the *major premise* "all men are mortal." I have merely linked the predicate of the *major premise* "mortal" to the subject of the *minor premise* "Socrates," and said "Socrates is mortal." Most of our condensed statements of this sort may be expanded in the same way into what is known as the *syllogism*.

**The Figures of the Syllogism.** This simple form—or first figure, as it is called—of the syllogism is subject to an even more complicated set of inferences than the proposition. We may invert the order of the subject and predicate of either or both of the premises, and we may further elaborate them with the implications of "some" and "all," and of "no" and "not." As a result, we get twenty-four logically

valid variations, of which five, however, give us partial or weak conclusions elsewhere demonstrated in full. To ensure correct inference and reasoning we must be careful to indicate whether we are thinking of our subjects and predicates in terms of "all" or "some," and to what extent we are carrying the process of exclusion when we use "not" and "no." The mechanism of the syllogism has, with some additions and modifications, remained the basis of our formal logic until very recently.

Before we desert the syllogism, a final point must be mentioned. The validity of the syllogism is independent of the truth or falsehood of its content. For example, the syllogisms "all centaurs are half horse, half man; Cheiron was a centaur; therefore Cheiron was half horse, half man," and "all Scots are Mongolian; Robert Bruce was Scotch; therefore Robert Bruce was Mongolian" are perfectly good syllogisms and capable of twenty-four logically correct variations, though the one deals with a myth and the other starts with a lie.

**Induction.** So far we have been dealing with the correct deduction of conclusions from propositions whose truth is taken for granted. We have now to face about and ask ourselves if and how the truth of the propositions from which we deduce consequences can be established. Plainly such a question has to do with the inferring of general rules from the observation of particular data—or with what we call *induction*.

Many philosophers today feel that it is impossible to infer infallible general rules and propositions of this sort, and are inclined to regard all scientific and philosophical theories as speculative hypotheses whose certainty is always open to doubt. But Aristotle, who believed that the formal structure of the universe is eternal and immutable, and that we have an immediate intuition of its Forms and categories, was troubled by no such suspicions. Knowledge of the universal, he felt, was given along with our perception of particulars, since a substance is always some sort of substance, and the mind can proceed immediately, step by step, to the *summum genus* under which a thing falls. The individual man, for example, is at once known to be a human being, human beings are apprehended as two-footed mammals, mammals as viviparous living beings, and so on "until the indivisible concepts, the true universals, are established," and we reach the final Forms with which we describe and explain the universe. Hence, clearly "we must get to know the primary premises by induction."<sup>4</sup>

<sup>4</sup> *An. Post.*, II, 19, 99 b, 32 ff, 100 a, 14 ff.



These ideas, which provide us with the primary assumptions of scientific thought and investigation, cannot themselves be demonstrated or reasoned out. They have to be taken for granted, since the concepts that explain and make all things clear cannot themselves be explained or further clarified. Moreover, Aristotle assumes that things cannot both be and not be (the law of self-contradiction), that they must either be or not be (the law of excluded middle), that our words have meaning, and that objects corresponding to them exist.

**Scientific Demonstration.** Scientific method, outfitted with these assumptions and with the logical procedures of deduction and induction, aims at discovering the true definitions or essences of things. Mere definition, however, does not prove that a thing exists, and, as science is interested only in the existent, a scientific definition must show why and how the event comes to pass. For until we have discovered the cause of an event we are unable to place it. We do not know for sure whether it is a dream or an illusion or a so-called objective occurrence. A scientific definition, then, must include the cause among the essential attributes.

We cannot, of course, demonstrate a substance into concrete existence or into being the kind of substance it is. We can only intuit and observe its presence and its qualities. But we can demonstrate why and how it occurs, and thus give a reason for the presence and the peculiarities of what we experience.

**Inclusion of the Cause in the Definition.** The discovery of the cause and the inclusion of the cause in the definition of an event can be made by the application of logic and of syllogistic procedure to the situation in question. Aristotle gives as an example the definition of a lunar eclipse, which, he says, to be scientific must comprise not only the descriptive phrase "privation of the moon's light," but the reason why the light is cut off. To find this reason we must look for a middle term between "moon" and "privation of light" which is "commensurately universal" with eclipses, just as in arguing that Socrates is mortal, we had to find a middle term connecting Socrates with mortality. We discover this middle term by experimenting with various concepts till we hit upon one that fills the bill. It proves to be the idea of the passage of the earth between the sun and the moon, since this idea alone will fit and explain all the aspects of all lunar eclipses. Our scientific, all-inclusive definition of a lunar eclipse will therefore be "a privation of the moon's light by the interposition of the earth," because "all" (not some) "interpositions of the earth give rise to

eclipses.”<sup>5</sup> For then, and then only, have we so defined a lunar eclipse that the statement of why it occurs is also a statement of what it is in essence, and thus demonstrated that the cause is essential to the effect. Any seeming plurality of causes means that the class of phenomena under investigation has not been analyzed into all its aspects, and is therefore incompletely defined.

**Danger of Regarding Effects as Causes and Vice Versa.** In establishing the causes of events, we must, Aristotle tells us, be careful not to confuse two uses of the word “because.” For instance, he says, we can demonstrate scientifically both that the planets are nearer than the fixed stars because they do not twinkle, and that they do not twinkle because they are nearer. But, in the first case “because” denotes merely a reason for our believing the planets to be comparatively near, whereas in the second it denotes an objective, physical effect of their nearness. The steadiness of the planets’ light does not cause them to be near. It merely causes us to think them near. At the same time it is the necessary effect of their nearness. And the cause of our belief that the planets are near (their untwinkling light) must be shown to be the inevitable consequence of their proximity to the earth, before we can be said to have scientific knowledge of the essence of the phenomenon in question.

Unless we take care to distinguish these two meanings of “because” we are likely to regard effects as causes and causes as effects, and thus to fall into error.

Induction and scientific method are as tricky and full of pitfalls as deduction is, and Aristotle warns the would-be scientist as well as the formal logician against erroneous reasoning. At the same time he enumerates certain very general forms of argument which, though specious, are plausible enough to take in not only those who hear but those who use them. We may use words ambiguously, or punctuate our sentences and thoughts so as to give false emphasis and impression. Or we may palm off an accidental quality as an essential property, or a special case as a general rule (*a dicto secundum quid ad dictum simpliciter*). Again, we may befuddle ourselves as well as our opponents by substituting false for true causes (*non causa pro causa*), or by simply begging the question and assuming the point at issue (*petitio principii*).

<sup>5</sup> *An. Post.*, II, 90 a, 3 ff.

## II. ETHICS

**Early Platonic Influence.** Aristotle's first meditations upon ethics, like those upon metaphysics, seem to have been dominated by Plato's influence. In the early dialogue, the *Protrepticus*, ethics is regarded as an exact science which acquaints us with standards of right conduct built into the fundamental structure of the universe. But in the *Eudemian Ethics*, whether it marks a progress in Aristotle's own thought or the revolt of some disciple against the final, more naturalistic conclusions of his master, the notion has been abandoned that ethics rests upon absolute knowledge of a transcendent good. The nature of right and wrong is rather to be inferred by "using perceived facts as evidence and illustration." But traces of Plato still linger in the substitution of religious insight for the intuition of the good, in the feeling that God sets the moral pace for man, and that morality is essentially a service and imitation of a divine model. And the Platonic dualism persists in the belief that morality lies in freeing ourselves from the world of sense and all our attachments to it, and in raising ourselves from earth towards heaven.

From the *Nicomachean Ethics*, however, the Platonic influence has almost entirely disappeared. The highest in us is, to be sure, still akin to the divine, but the divine activity is no longer a moral but a purely intellectual ideal which is imitated by us most perfectly when, in our most detached, disinterested, impartial, and scientific moods, we are most deeply concerned, not with good and evil, but with truth. Such dualism as remains is not that of a higher and a lower within the moral sphere, but of the lower, moral activities as a whole with the higher, intellectual activities of pure contemplation.

**Ethics Concerned with the Human Good.** Ethics, Aristotle now tells us, is concerned with the human being as we find him, remembering always that he is a composite being with body, passions and parts, which determine the nature of his good and underpin his moral character. It is the business of ethics to determine on a purely scientific basis the kind of life that is best for such a being. This in its turn will be determined by its capacity to produce *happiness*, which is the end at which all our activities aim, and to which they strive to become the means. It is highly important for us to know in what happiness consists, but such knowledge, considering the variety and variability of human nature, can never be exact. In short, ethics is doomed from the start to be an inexact and approximative science and therefore,

incidentally, a less agreeable and less worthy object of intellectual study than an exact science like mathematics.

**Popular and Platonic Views of the Good Criticized.** How, then, are we to define human happiness? Candidates for the position, like riches, honor, virtue, amusement and the like, are immediately rejected on the ground that they are desired not for themselves but for the happiness they bring. And the Platonic notion of an absolute good laid up in heaven proves to be open to all the objections urged against the Ideas in general. Pleasure, however, is a formidable candidate, and to combating its claims Aristotle devotes considerable space.

Plato's attack on hedonism, however, he regards as unsuccessful and unjust. Pleasure is not in itself bad. Very few pleasures, even the violent physical ones, are base or harmful unless carried to excess. That pleasure is the better for wise guidance does not prevent it from being in itself *a* good if not *the* good. Neither does the fact that it is not a quality, or admits of degrees of intensity. Moreover, it is not a process of becoming, as Plato maintained, rather than a goal; nor, if it were, would that be anything against it. It cannot be a process, for it is neither quick nor slow nor divisible nor at times incomplete like motion. It is simply *there* in its entirety when it occurs. It is not a "becoming" for it comes from nowhere and goes away nowhere. It is not a physiological process. It merely accompanies processes, and mental as well as physical ones, at that.

**Untenability of Hedonism.** Nevertheless it is not *the* good. It is only good when it accompanies activities conducive to happiness. Its goodness is not determined solely by its pleasurable nature but by its sources and its results. It is not preferable at any price. Nay more, it could be removed and the functioning of the organism would continue without its stimulus. "It seems clear, then, that neither is pleasure the good nor is all pleasure desirable . . . though some pleasures are desirable in themselves, differing in kind or in their sources from the others." <sup>6</sup>

Pleasure really is the completion or crown of an activity—the reward bestowed by nature for proper functioning. It is, indeed, a work of supererogation on her part, since our activities would go on and complete themselves without it. It rests upon healthy functioning as the "bloom of youth does on those in the flower of their age." It is therefore inseparable from our activities, and we cannot avoid it or help feeling it, as the Cynics would fain have done. Accompanying morally desirable and morally undesirable activities alike, it is itself morally

<sup>6</sup> *Eth. Nic.*, X, 3, 1174 a, 4-12.

neutral. And though entangled with happiness, it is not itself happiness.

Happiness, however, like pleasure is involved in action and bound up with it. Though the goal of activity, it does not put an end to the activity that attains it. But, unlike pleasure, it must last more than a moment to be realized. It needs a certain length of time for its fruition. No one dead in childhood can be called happy. For that matter it is doubtful whether an individual can be called truly happy even at the end of a long life, if he is not honored after his death, or if his descendants meet with great misfortunes.

**Happiness the Rationally Organized Activity of the Whole Man.** How then are we to find and define human happiness? The answer is not so difficult. Just as each organ of the body has its distinctive function, and measures its well-being, or "happiness," by the degree of excellence or "virtue" with which it exercises that function, so man's happiness will go hand in hand, primarily with the excellent or "virtuous" operation of his distinctive activity, which is reason, and secondarily with the harmonious exercise of the other activities of his composite and complicated nature. In short the "human good turns out to be activity of the soul in accordance with virtue, and, if there be more than one virtue, in accordance with the best and most complete."<sup>7</sup> Moreover, for that best and most complete operation of our total human nature, in which human happiness lies, not only is completeness of life necessary, but certain external conditions like friends, money, children, good birth and good looks are highly conducive, if not absolutely indispensable. "For it is impossible, or not easy to do noble acts without proper equipment."<sup>8</sup>

Again, the excellent, or happy, functioning of the human organism presupposes on its intellectual side education and enlightenment, and on its ethical side the inculcation of habits, or rather, the actualization of potentialities already present within us. Moral principles are neither inborn, as Socrates and Plato maintained, nor artificial and conventional as the Sophists taught. They are *developed*. The aim of education and of the inculcation of habits is to make virtuous functioning as nearly spontaneous as possible.

**The Golden Mean.** But what is the mark of excellent or "virtuous" activity? How are we to know whether or not we are on the road to happiness? The test of excellence and the guarantee of happiness are to be found, Aristotle replies, in the *degree* to which activities are

<sup>7</sup> *Eth. Nic.*, I, 7, 1097 b, ff.

<sup>8</sup> *Ibid.*, 8, 1099 a, ff.

exercised. Activity is *virtuous* when it is exercised neither insufficiently nor excessively, but in moderation. Over-indulgence and over-suppression of any activity are both *vicious*. Right conduct is just enough, wrong conduct is too much or too little, of a given function. This is the famous Aristotelian doctrine of virtue as the "golden mean"—a doctrine characteristic of the Greek passion for balance and reasonableness already set forth by the poets Theognis and Pindar in the phrase "nothing in excess," and expressed philosophically and politically by the Pythagoreans and Plato.

The mean, however, is not absolute but relative, differing as it must with respect to the individual and to the object, time, place, and circumstances of the action. Indeed, it takes great intelligence and great excellence to hit it exactly. But the confines of morally satisfactory behavior are spacious and flexible enough to allow for a certain amount of swing in one direction or the other. In determining the amount of permissible deviation, experience and good taste are important factors. Experience also shows us that on the whole it is preferable to swing towards underdoing rather than towards overdoing. It should be noted that there is no opposition here of intrinsically higher to intrinsically lower activities. All the functions with which ethics is concerned are in themselves morally neutral. Their goodness or badness, or in other words, their bearing upon human happiness, is wholly determined by the *degree* of their exercise. Precisely the same function is virtuous in moderation as is vicious in excess or defect.

**Illustrations of the Golden Mean.** This doctrine of virtue as the golden mean is illustrated by Aristotle at length. He arranges a long list of moral qualities in triads of virtuous means between vicious extremes. For example, courage is the right or mean amount of the same activity as in deficiency constitutes cowardice, in excess, rashness. Temperance is a moderate love and pursuit of the physical pleasures; insensibility is too little interest in them, and self-indulgence or sensuality, too great a one. Liberality is the golden mean between stinginess and prodigality; magnificence, between ostentatious and niggardly living; greatness of soul, between humility and vainglory; and so the list goes. Acts like theft, adultery, murder, and the like, and emotions like shamelessness, envy, and spite, Aristotle deals with by pointing out that they are in themselves already either excesses or defects, and therefore cannot exist in moderation.

The virtue of justice is important in that it links moral with legal considerations and also introduces into ethics the question of the *intention* with which an act is committed. It deals with rewards and

punishments and with the fair treatment of one individual by another. The accommodation of justice to the particular case is notoriously difficult, and gives rise to the distinction between justice and equity. Equity lies in being scrupulously fair even when considerations of legal justice do not force you to be so.

**Voluntary Action and Moral Freedom.** In last resort, however, both the moral and the legal justice or injustice of an act, or, in other words, the propriety of its social and legal reward or punishment, are determined by the *intention* with which it is committed. An act committed under compulsion or because of ignorance is neither praiseworthy nor reprehensible. To be one or the other it must be *voluntary*; that is, it must have its "moving principle" wholly within the agent himself. No man can be held morally responsible for an act which he is compelled to perform by an external force and contrary to his own inclination. At the same time, no man can claim exemption from responsibility for acts committed on the spur of the moment or from considerations of pleasure and pain. For such acts arise from within himself, and nothing could be more "voluntary" and "free" than the drive of the organism toward the ends imposed upon it by its own nature. As long as one is self-determined, one is free and responsible.

Still, the situation is complex. Is a drunken person free? Is a man acting under terror of a threat free? Is a man free who sacrifices his own honor in order to save those dear to him? We have, as Aristotle realizes, and as morality and the law have always recognized, a vast area of borderline cases, where the voluntary and the involuntary are hopelessly entangled.

The same is true of acts committed ignorantly. They are not voluntary, but neither are they involuntary unless afterwards we feel remorse. Again, we must distinguish acts committed *in* ignorance from those done *from* ignorance. When drunk, for instance, we act *in* ignorance of the consequences of our behavior. But we do not act *from* ignorance of them, since drunkenness, not ignorance, is the reason for our behavior. Acts done *from* ignorance are usually involuntary and excusable, whereas acts done *in* ignorance frequently are not. However, to act *from* ignorance of general moral principles does not excuse the evil-doer whose eyes are open to the consequences of his particular deed. It is only acts resulting *from* ignorance of *particular* results that can be considered *involuntary*.

**Intention, Preference, and Choice.** *Intention*, or the self-determination of the moving principle within us to a particular course of action when faced with a particular set of circumstances, involves *preference*

and results in *choice*. These are narrower in their scope than volition or appetite (which we find also in inconsequential and impulsive acts), and than wishing and opining (which concern themselves not only with the practicable but with the impossible and the inevitable). Nor have they to do with the ends of action (which, after all, are prescribed for us by our nature and are stated by our wishes) but rather with the means to those ends. Then, too, choice involves weighing and deliberating. In short, it may be defined as "deliberate desire of things in our power."

Since that is the case, obviously the Cynic contention that virtue is the good, is exercised for its own sake, and is its own reward, will not stand. On the contrary, "the exercise of virtue is concerned with means" to the good. Moreover, this good rests not upon a moral foundation but upon a natural one. Nature has made us the kind of beings we are, has molded us in the human form and no other, and has outfitted us with the wishes, aspirations, and ideals appropriate to our particular structure. We can no more help wishing to be healthy and happy, to eat, to procreate, to think, to live socially and rationally, than we can help being human beings. There is nothing to be ashamed or proud of in this, no virtue and no vice, no occasion for praising or blaming either nature or ourselves. Moral conduct begins and ends in the measures we take to realize our natural ends, and these measures are virtuous or vicious, right or wrong, solely as they are calculated to ensure or to defeat the attainment of these ends. Far, then, from moral standards determining what we *ought* to aim at, what we naturally *do* aim at determines moral standards.

At the same time, Aristotle avoids the Protagorean and morally anarchistic implications that might be drawn from this position. Each man is not a law unto himself, justified in taking himself as he finds himself and in pursuing his ends, whatever they may happen to be. For all men are *human* and actualize the same Form. In disclosing to us the outline of this form, observation of human nature also discloses the approximate limits of a "natural object of wish," revealed to us in the wishes and ends of the run of healthy, typical individuals. It allows for some latitude, to be sure, but where the variation of individual wishes goes beyond the limit, we are dealing with warped instances of the species, whose ends are no longer *human*, and therefore are not properly held or pursued by *human* beings. Although, then, the wishes and ideals of every individual man *seem* good to *him*, whether they really *are* good depends upon their agreement with the "natural object of wish" of mankind in general. In short, it is not the indi-



vidual but the species that determines the *natural* good of the individual belonging to that species.

**Moral Responsibility.** We turn now to the question of moral responsibility. Since our choices are determined in last resort by the moving principle within us, we are responsible for them and for their success or failure in hitting the golden mean. Evil-doing, then, is not involuntary, as Socrates thought. It is just as voluntary as virtue is, since we are as much the "moving principle" of our bad acts as we are of our good ones. If vice is involuntary, so is virtue, and deserves praise as little as vice deserves blame. Nor can we plead ignorance as an excuse, since for the most part it is avoidable. We are not forced by any power outside ourselves to be careless or unacquainted with the law, or to fly into such a passion or get so drunk that we do not know what we are doing. We possess the "power of taking care," and it is not our misfortune but our fault if, by a failure to exercise that power, we allow ourselves to be blinded temporarily or permanently to the consequences of our acts.

Nay more, the individual is not only responsible for pursuing his ends. He is also partially responsible, at least, for *having* them. He can be morally censured even for *wishing* the things he wishes. To be sure, to good and bad alike "the end appears and is fixed by nature." Nevertheless, one's nature is to some degree a matter of training, and the "natural object of wish" can be inculcated, if a man takes himself in hand before his character has become set. Although then "the end appears to each man in a form answering to his character," still he, "being somehow responsible for his state of mind . . . will also be somehow responsible for the end appearing to him as it does."<sup>9</sup> Indeed, if we had no right to reprove a vicious man for his low ideals, the virtuous man would deserve no credit for his high ones. And in any case, even if a man's propensities were thrust upon him, as physical beauty or deformity are, he could still be held to account for acting or not acting in accordance with them, since, at any rate, that power would be his.

**Moral Virtue Based on Intellectual Excellence.** Selecting the golden mean involves deliberation, as we have seen, and deliberation brings intelligence into play. Thus we pass from moral virtue, or excellence of conduct, to intellectual virtue, or correctness of understanding, from which alone right behavior can proceed.<sup>10</sup> The function of rea-

<sup>9</sup> *Eth. Nic.*, III, 5, 1114 a, 31-1114 b, 3. (I have slightly expanded the Ross translation.)

<sup>10</sup> For the "intellectual virtues," cf. *Eth. Nic.*, VI.

son in the moral life is twofold; first to discover the natural aims of the human organism and then to devise the best means for realizing them. When the intellect meditates upon human nature and understands *what* will make us happy, it is exercising in the sphere of ethics its essential "philosophizing," scientific, *contemplative* activity of grasping the truth. When it is calculating *how* to attain what will make us happy, it displays itself as *practical reason* which is the basis and guide of distinctively moral *action*. Indeed, morality in last resort is nothing but *intelligent conduct*—conduct that flows logically, and even after the fashion of the syllogism, from the assumption a correct understanding of the human organism permits us to make with respect to the nature of the human good. Rightly directed, desire must pursue just what reasoning asserts. Conversely, individual departures from the "natural object of wish," and ill-chosen means to its attainment, are due to the "being untrue," or the false understanding, in which intellectual vice consists. The virtue and vice of both contemplative and practical reason are identical. Morally virtuous behavior is reasonable conduct; morally vicious behavior is a symptom of irrationality.

Hence Socrates, Aristotle feels, was both right and wrong in his assertion that the virtues are one, and that the one virtue is knowledge. There are as many different virtues as there are human activities, no one of which (except reason) can pretend to have knowledge of itself. But the moral attitude is the same towards every activity and does consist in *knowing* the golden mean in each.

**Incontinence and Vice.** Again, Socrates is wrong in supposing that right action must necessarily follow from correct knowledge of the end to be pursued and of the means to its attainment. He failed to reckon with *incontinence*, as Aristotle calls it, which is the habitual and deliberate flouting by desire of the knowledge of good and evil.<sup>11</sup> Such flouting, however, is not a mere triumph of passion over clear knowledge and of sheer irrationality over the moral logic of practical reason. That logic, being moral and therefore infected with desire, suffers from a defect peculiar to itself. Desire has an argument of its own, with which it stifles the counsels of prudence. In the first place, it opposes the certain major premise of practical reason, that acts of a given sort are bad for us, with the equally certain major premise that they are acts we *want* to do. So far honors are equal. But when it comes to the minor premise, desire may hold the winning hand. For the minor premise of practical reason, that the particular act under contemplation is of the bad sort, admits of uncertainty and engenders

<sup>11</sup> Incontinence is discussed in *Eth. Nic.*, VII, 1-10.

doubt and hesitation, because our knowledge of particulars is never exact and complete; whereas there can be no uncertainty about the minor premise of desire, that the act in question belongs among the acts I *want* to do. The minor premise of desire, then, may be stronger logically than that of reason and give rise to the stronger syllogism. In other words, the fact that we *want* to do the thing may carry more weight with us than does our hesitation as to whether the thing is to our advantage in the long run. In that case, the morally unsound conclusion is logically bound to be drawn.

The out-and-out vicious man, however, differs from the merely incontinent individual in feeling no hesitation in the minor premise of his calculation. He feels with equal certainty both that he wants to commit the evil deed and that it is to his advantage to do so. Such a man is incurable. But the incontinent person may be cured of his hesitancy and may be established in the habit of refusing on rational grounds to give way to wants whose morality is questionable. Unless this hesitancy is overcome, the incontinent attitude becomes habitual and hardens into criminality.

**Friendly Association.** So far Aristotle has been studying morality "in that form which is concerned with a man himself—with the individual." But he is also insistent that the individual is by nature a "political animal" to whom social and political life and organization are instinctive and essential. The social side of morality, its bases and developments, he discusses in Books VIII and IX of the *Nicomachean Ethics*, which deal with friendship, and in the *Politics*. Friendly association, he points out, is necessary to the welfare of the individual and indispensable to the development of many of his virtues. There are three types of such association, according as they exist for the purpose of pleasure, utility, or the permanent enrichment of the individual's character and life. The first two types are selfish, treat other people as means to enjoyment or profit, and establish only passing relationships. But the parties to the third type, "the friendship of the good," as Aristotle calls it, treat one another as ends and seek to give as much as they receive. Their friendship for one another is disinterested and is aroused by intrinsic excellence.

**Identity of Self-Love and Love of Others.** However, even this sort of friendship is a kind of self-love. For, "men love what is good for themselves; for the good man in becoming a friend becomes a good to his friend. Each then loves what is good for himself," and regards his friends as a sort of extension of himself. Still, there is nothing "selfish," in the bad sense of the word, about such self-love. For the

object of one's affection, as in the case of a child or a brother, is identified with one's self not as a mere plaything or possession, but as "a sort of other self," leading "a separate existence." Moreover, "friendship of the good" would "seem to lie in loving rather than in being loved." From self-love of this sort the opposition between egoism and altruism has disappeared. The self a man loves is the wider, social self. It is only when the self is identified with "wealth, honor, and bodily pleasures," rather than with our friends, and is cultivated at other people's expense, that self-love becomes a term of reproach. The good man is willing to lay down wealth, honor, position, the opportunity to do noble deeds and win renown, nay life itself, for the sake of his friends and his country; realizing, as he does, that it is the quality rather than the quantity of life that counts, and preferring "a twelve month of noble life to many years of humdrum existence, and one great and noble action to many trivial ones." In the case, then, of men actuated by the "friendship of the good" there is no sense in raising the question "whether a man should love himself most or someone else."<sup>12</sup>

### III. POLITICS

**The Family and the State.** In the *Politics*, which is a compilation of different treatises rather than an organic whole, Aristotle discusses the two great institutions, the family and the state, produced by the instinctively social nature of man. The family is the primitive human unit and owes its existence to the sexual nature of human reproduction. It quickly expands so as to include slaves and property—both of which institutions are as natural and as imbedded in the constitution of the universe as the distinction of sex itself. Nature has created man an acquisitive animal, and has established different degrees of ability in human beings that mark out some for masters, some for slaves. Fundamentally, however, slavery is a matter of character rather than of legal institution, and the institution is wrong when it runs counter to natural distinctions and makes slaves of those whom nature has created worthy of a higher position.

Property arises out of the natural propensity of the human animal to hunt, fish, till the soil, and lay up sustenance for himself. This is the root of the whole economic system with its trade, its medium of exchange, its banking and lending. As long as the economic system, like slavery, follows the lines indicated by nature, it is unobjectionable.

<sup>12</sup> On friendship as self-love, cf. *Eth. Nic.*, IX, 8.

But wealth regarded as an end in itself and many of the means of procuring wealth are unnatural and to be deplored. One of the means which Aristotle particularly condemns is putting money out at interest.

From the union of several families springs the village, and "when several villages are united in a single complete community large enough to be nearly or quite self-sufficing, the state comes into existence, originating in the bare needs of life, and continuing in existence for the sake of the good life." Since "the earlier forms of society are natural . . . it is evident that the state is a creation of nature and that man is by nature a political animal." Nay more, since man is naturally a political animal and dependent upon the state both for his individual and family life, "the state is by nature prior [logically] to the family and the individual."<sup>13</sup>

**Criticism of Plato's Social Theory.** In his theory of the state as in his ethics, Aristotle apparently began as a good Platonist. In the *Protrepticus*, for example, he urges the statesman to look, in framing a constitution, not to existing human institutions but to the divine and enduring ideal of what a perfect state should be. And in the earlier portions of the *Politics* we find him engaged, like Plato, in depicting the ideal commonwealth. But his Utopia sharply differs from Plato's, which he subjects to a searching criticism. He particularly attacks the rigidity and unity of the Platonic republic and the confinement of the exercise of government to a closed corporation like the guardians. He favors rather the greatest degree of flexibility, division of labor, and variety of interest consistent with social stability, and the rotation of all the citizens in positions of authority. Against Plato's scheme for communizing property, women, and children he urges as a fundamental objection that the individual himself can never be communized and freed from the distinction between mine and thine. Public interest, then, must always rest upon private interest, and public spirit must consist in freely placing at the service of the community something that the individual instinctively considers his own. For the state deliberately to deprive the individual of what he regards as *his* is to create an artificial opposition between private and public interest, and to make a forced sacrifice of what should be a free gift. It can only embitter his natural propensity to share his own with his fellows, and thus poison the impulse from which society springs. "It is clearly better," then, "that property should be private but the use of it common; and the special business of the legislator is to create in men this

<sup>13</sup> *Pol.*, I, 2.

benevolent disposition.”<sup>14</sup> Furthermore, it is always better to have an eye upon past history and actual conditions in planning one’s reforms.

**The Test of a Good State.** The test of a good state is its service of the common interest in accordance with strict principles of justice. Such service may exist under the conditions of kingship, aristocracy, or constitutional democracy; and ceases equally to exist under tyranny, plutocratic oligarchy, or an unbridled democracy in which the poor and the lower classes are favored at the expense of the common interest. One thing, however, is certain—whatever the form of government, it must be constitutional. Law must be supreme.

Under ideal conditions, the public interest would be perhaps best served by an enlightened absolute monarch. By virtue of his isolated and unpartisan position he would be well fitted to frame and administer the laws, and to mitigate their inflexibility, which is the great vice of legal enactments, by modifying their application to suit individual cases. At the same time, under actual conditions absolute monarchy has its disadvantages. It is too apt to degenerate into tyranny; the load it puts upon the shoulders of one man is too great, and the delegation of power to others leads to the abandonment in fact, if not in theory, of the advantages and principle of a single absolute ruler.

All in all, what shall be the best form of government depends upon the temperament of the people. A highly civilized race “superior in the virtue needed for political rule is fitted for kingly government.” But aristocracy is better adapted for a race that lays stress upon freedom and at the same time produces a class of superior individuals. Constitutional democracy best suits the needs of a warlike community in which discipline universally prevails, and which is accustomed to rotation of command.

But in any case, whatever constitution it may adopt, that form of government is best in which every man, whoever he is, can act best and live happily. The test of ideal government is not its particular organization, but the results of that organization in promoting the welfare and happiness, not of any one class, but of all classes. There is nothing to the objection that government of any and every sort interferes with the liberty and self-development of the individual. This may be true of tyranny, be it the tyranny of a king, an oligarchy, or a democracy. But constitutional government does not suppress but rather expresses the political nature of man, engages rather than im-

<sup>14</sup> *Pol.*, II, 4-5.

pedes his practical and moral activities, and is an aid rather than a detriment to the rational life and the contemplation of truth. Nor will such a government interfere with those individual values and activities that are private, cannot be communized, and are exercised in isolation.

**Physical Circumstances of the Ideal State.** Aristotle now turns his attention to the physical circumstances of an ideal state. It must not be larger than the conditions of a prosperous and happy life demand and permit. "A great city is not to be confounded with a populous one." Size breeds disorder and ugliness. The ideal state must, however, be able to produce everything its citizens need, and be easy of defense. It should be near the sea, in order to facilitate trade. Its site must be healthy and include an abundant supply of pure water. Its streets should be laid out in rectangular fashion and with an eye to beauty. The territories of the state should be so divided among the freemen that each has a country as well as a town estate. In this way the opposition of rural to urban interests is avoided in times of peace, and all are equally exposed to the hazards of war.<sup>15</sup>

Citizenship will be denied to merchants and tradesmen, since "their life is ignoble and inimical to virtue," and to husbandmen because they lack the leisure that "is necessary both for the development of virtue and the performance of political virtue." As far as possible these functions will be performed by slaves—who must be kindly treated and should be encouraged to work by the hope of gaining their freedom.

**Education in the Ideal State.** The freemen, themselves, should live as communal a life as possible. In the absence of the impracticable ideal of an absolute monarchy, "all the citizens alike should take their turn of governing and being governed." But if democracy, also, is not to be impracticable, a sound system of education must be established, calculated to train all citizens both to rule and to obey. This system must be realistic and based upon a knowledge of the kind of animal man is in general, and of the "diversities of human lives and actions."<sup>16</sup>

Education will begin before birth by the practice of eugenics and birth control, supplemented by the destruction at birth of deformed children. The development both of body and of mind must begin at birth. Both the physical and the mental diet of the child must be carefully supervised. At seven he will go to school, where he will learn

<sup>15</sup> *Pol.*, VII, 4-6.

<sup>16</sup> *Pol.*, VII, 10.

reading and writing and arithmetic and gymnastic and "music" (in the Greek sense of the word). To the objection that "music" is not "practical," Aristotle replies that the end of education is not so much to fit a man for a vocation as to teach him to value leisure and make it conduce to his welfare and happiness. To place the accent of education upon professional training is the mark of an illiberal mind. "To be always seeking after the useful does not become free and exalted souls." For "leisure itself gives pleasure and happiness and enjoyment of life, which are experienced not by the busy man but by those who have leisure." There is then "a sort of education in which parents should train their sons, not as being useful or necessary, but because it is liberal or noble."<sup>17</sup>

**The Best Government and Revolution.** Aristotle's description of the ideal commonwealth here breaks off abruptly. Apparently either the rest of it is lost, or he left it unfinished. In any case, his earlier interest in ideal states was short-lived, for the portions of the *Politics* presumably written after his return to Athens are quite non-utopian. His concern is now with the best practicable form of government, and this he finds in "polity"—a happy mean between oligarchy and democracy, in which the bearing of arms and the franchise is restricted to property-owners, and a large, prosperous middle class holds the balance of power between the upper class and the proletariat. And he lays down a few rules of political hygiene. The spirit of obedience to law should be inculcated. The authorities should be men of ability, integrity, and loyalty to the established constitution. They should be fair to and considerate of the governed, and should be quick to discern and reward superior talent. Above all, every state should be so administered and so regulated by law that its magistrates cannot possibly make money. For rich and poor alike are irritated at the thought that they are being bled by grafters.

Yet, even so, these better forms of government are threatened by revolution, which is the bane of all states, good or bad. Its causes are manifold and its occasions often trivial. No matter how well governed a state may be, there is always a tendency of the many to resent the dominance of the few. Each political type has its special precautions to take. The king should avoid despotic ways and, still more, despotic airs, and should welcome and observe constitutional restrictions upon his authority, if he wishes to avoid revolution and preserve the monarchy. Aristocracies should be on their guard against plutocracy and

<sup>17</sup> *Pol.*, VII, 17; VIII, 3.



the oligarchic substitution of the welfare of a special class for the public weal. The bane of constitutional democracy lies in too little leisure for politics among the upper classes or too much leisure among the lower. Democracy, for all its theory of equality, the rule of the people, and government by the will of the majority, can only work if the more able have the time and are given the opportunity to direct affairs. This may happen sometimes in simple, contented agricultural or pastoral communities, where there is little political ambition or corruption, and the people are willing to leave the actual administration of the state to an upper, leisured class. But if the upper as well as the lower classes are immersed in business, as is the case in industrial and commercial communities, the constitution is apt to be allowed to take care of itself, and, though plenty of laws may be passed, little heed is paid their administration and application to special cases.

**Dangers of Unbridled Democracy.** Still, this is far less dangerous than the presence of so much leisure among the lower classes that they acquire the taste and have the time to occupy themselves overmuch with legislation. In that case the "people," not the constitution, "becomes the monarch," and "demagogues make the decrees of the people override the laws, by referring all things to the popular assembly." The result is a tyrannical rule of the majority. For "the decrees of the *demos* correspond to the edicts of the tyrant; and the demagogue is to the one what the flatterer is to the other." Such a state is ripe for revolution, either by rebellion of the oppressed classes against the oppressing masses, or by the assumption of despotic power by some demagogue.

These warnings, however, are, as Aristotle recognizes, counsels of perfection. All governments tend to degenerate towards the substitution of private for public interest, class—or mass—domination, and the tyranny of a part over the whole. Yet, even so, the resultant, diseased political types may succeed in preserving themselves by exercising certain precautions. Democracies, even if unrestrained by constitutions and governed by the whim of majorities, will do well not to attack the eminent, or to confiscate the property or the incomes of the rich. Nor should they embark on a policy of doles and compensations to the poor. "Such help is like water poured into a leaky cask," since "the poor are always receiving and wanting more and more." The rich can do their part in averting the development of these dangers by being generous and wise and using their surplus wealth in providing employment for the poor by setting them up to little farms and helping them "make a beginning in trade or husbandry."

**Oligarchies and Tyrants.** Oligarchy may get on well enough if it avoids lawlessness, sees that the citizens exceed in strength the non-citizens, makes the higher offices too expensive for the ordinary man, and keeps the people amused by magnificent spectacles and soothed by splendid public donations of one sort or another that may serve as "memorials of its munificence." It would be well advised also to train and maintain a strongly armed force, preferably of cavalry, since "this service is better suited to the rich than to the poor." Above all, it should avoid recruiting troops from the masses, since such a force is apt to prove a boomerang.

To tyranny, which combines all the vices of oligarchy and democracy, two courses are open. On the one hand a despot may play the heavy tyrant, cutting off the heads of all men of spirit; prohibiting clubs, assemblies, education, and discussion; establishing a system of espionage; encouraging private and clan jealousies; impoverishing his subjects, and keeping them hard at work; and, if need be, indulging in a foreign war, in order to rally them about himself as their leader. On the other hand, he may hide the mailed fist within the velvet glove by clinging to the appearance of constitutional government and affecting financial honesty. He should also defer, outwardly, to religion and morality, refrain from outraging or insulting his subjects, and flatter the upper classes into contentment with his rule. His punishments should seem to come, not from him, but legally through the courts of justice. And above all he should give the impression of being a great military leader. Tyranny and oligarchy, however, are in their very nature the weakest kinds of government and the most liable to revolution.<sup>18</sup>

**The Art of Oratory.** In his *Rhetoric* Aristotle discusses the art of oratory, so important to the would-be successful politician or litigant in the law-courts. Success in winning a case or promoting a cause, be it good or bad, is the only measure of a telling speech. Since oratorical flights are not necessary in matters that are self-evident, and since their object is to make the merely probable and dubious seem absolutely certain and convincing, their appeal is primarily to the emotions rather than to the reason. Indeed, the test of a good orator is his ability to arouse the prejudices of his audience and to enlist them on his side. In accomplishing this the sentimentalities and moral aver-sions and convictions of his hearers are the orator's best friends, and by skillfully stringing together platitudes and maxims that reflect their

<sup>18</sup> On causes of, and prophylactics against, revolution, cf. *Rhet.*, I, 8; *Pol.*, V.

outlook on life he can win for himself the reputation of being "a man of sound moral character," and hence a sound thinker, and can give to his discourse a counterfeit logic and make those to whom he is speaking exclaim, "How true!" This assumption of a high moral purpose is far more important than any display of intelligence. The latter shows only horse sense, but a high moral tone suggests that the speaker has a noble nature—a suggestion that carries all the more weight, the less intelligent and more subject to emotional appeal the audience itself is.

The oration itself has two parts. "You must state your case and prove it." You should begin with an impassioned exhortation of some sort or other, which need have "nothing to do with the speech itself," but appeals to "the weak-minded tendency of the hearer to listen to what is beside the point." Then you state your case in such a way as to create an impression favorable to yourself and derogatory to your opponent. Here the "moral purpose" comes in handy. Proof is really not necessary. So-called argument will consist in discrediting your adversary and his proposals on emotional and moral grounds. And if you happen by chance to be reasoning, you should, if logic falters and good reasons fail, "fall back upon moral discourse" in the place of "argument." There should follow an epilogue, whose business is to fan to fever heat all the emotions and prejudices you have created.

**Rules of Style.** Naturally, political, legal, and ceremonial speeches will employ different means and be couched in different styles. The pleader in the law-courts, for example, must be expert in handling evidence, minimizing or exaggerating the importance of the witnesses' testimony, and suggesting perjury in his opponents and incorruptible honesty in himself. And the politician must know his subject, in order to represent or misrepresent it to his own advantage, and must be able to gauge and to sway the temper of the assembly.

So far as style is concerned, all orations should be clear, appropriate, natural, and suited to the kind of subject under discussion and the kind of people addressed. The speaker's periods should be well-rounded, but should avoid poetical rhythms. They should be short and compact, vivid and sparkling, and interspersed with epigrams and elements of surprise to capture and to hold the listeners' attention.

#### IV. THEORY OF THE FINE ARTS

**Art an Imitation of Nature.** Save for a short but important passage in the *Politics*, our knowledge of Aristotle's views about art is drawn

almost entirely from his *Poetics*, the first book of which, dealing with tragedy, has alone come down to us. His theory, as we shall see in a moment, is quite different from Plato's. All the fine arts, he tells us, in their several ways are essentially imitations of nature. The imitative character of art is deeply rooted in human psychology. Man is an imitative animal, and not only are his senses pleased but his intellect is stimulated by the act of imitation. This is true, even if the subject imitated be in other respects painful. Music, dancing, declaiming, singing, poetry, etc., express also man's native love of harmony and rhythm.

**Art a Divination of the Universal in the Particular.** Artistic imitation is not, however, as Plato maintained, of the sensible and the particular. Its medium, to be sure, is sensuous stuff, and its works are sensible objects. But it is a divination of what is universal and eternal in the particular—of what nature is trying, as it were, to say—and a work of art expresses in sensible terms the ideal after which she is striving.

**Art and Esthetic Pleasure.** Again, the business of art is not, as Plato taught, to edify and teach a moral lesson. Its justification does not lie outside itself. Its purpose is to give pleasure, and in proportion as it gives esthetic enjoyment it is good art. For that matter, to demand that art should always "teach a lesson" by exhibiting, for example, vice always punished and virtue triumphant, is the mark of a second-rate audience. To the enlightened and cultivated man endings that are invariably happy and moral appear ridiculous and titillate only his comic sense.

Again, it is the function of art to excite pleurably the passions and the emotions; for such excitement, instead of harming the soul as Plato thought, purges, lightens, delights, and heals it. Finally, art is not under even an esthetic obligation to give us enjoyment of the "higher" sort. The greatest art, to be sure, stimulates us and makes us think. But man needs recreation as well as serious endeavor, and, if he is to exercise his faculties at their best, he must have intervals of amusements and relaxation. It is the function of the lighter works of art to provide such intervals—nor are they less desirable because they are light. The lower classes, too, who are as a rule incapable of appreciating art of the more serious sort, are entitled to the less serious forms in which they can find entertainment and repose. It is better that they should enjoy art of some kind than be cut off altogether from esthetic pleasure.

**Good and Bad Art.** The "higher" and the "lower" in art, then, have little to do with morality. They are essentially matters of esthetics. This even is true of the choice of a subject-matter. To be sure, the subject must not be one that so outrages us in other respects as to prevent our enjoying it esthetically. But idealistic art does not lie in selecting and depicting morally superior subjects. It lies in choosing subjects, not necessarily ideal or desirable from the moral point of view, that can be manipulated so as to produce the most esthetic pleasure, and in bringing out their dramatic and artistic values. If moral goodness is chosen, then that goodness must be made esthetically interesting before art itself can be called good. Otherwise, it is photographic and mediocre, however "moral" its material. In the same way, "low" art lies not so much in choosing a morally "low" subject as in failing to bring out the highest *esthetic* values of one's material, whatever that material may be. A good example of "low" art is caricature. Nevertheless, such distortion of material in the interests of ridicule and laughter is quite permissible, as long as it does not cause pain or harm. Indeed, art of this sort, so far as it affords amusement, is good art of the lighter type.

The same tendency to free art from moralistic supervision is suggested by Aristotle's insistence that no one-sided person of narrow interests and outlook, even though it be the artist himself, is competent to judge of the all-round goodness or badness of a work of art. It is not for the maker but for the user of the rudder to estimate its real worth; not for the cook but for the *bon viveur* to say whether the dinner is excellent or poor. In like manner the test of fine art lies in the effect it makes, not upon the esthete or the puritan, but upon the "free and educated audience," composed of the "better public." It is in the enjoyment or displeasure a work of art produces in this "free and educated audience" that the only proper ground of approbation or censure lies.<sup>19</sup>

**Expurgation of the Classics Ill-Advised.** Judged by these standards, an expurgation of the classics in the interest of morality is, Aristotle apparently feels, hasty and misguided. The stories of the gods and heroes that shock the moral sense "may," he remarks, "be as wrong as Xenophanes says, neither true nor the better thing to say; but they are certainly in accord with opinion."<sup>20</sup> They are suitable material for the artist, and in spite of their ethical inferiority may be idealized

<sup>19</sup> On the freeing of art from moralistic standards and supervision, cf. Butcher, *Aristotle's Theory of Poetry and Fine Art*, pp. 215 ff.

<sup>20</sup> *Poetics*, 25, 1460 b, 36 ff.

and ennobled by artistic treatment, as they stand. Generally speaking, too, before we accuse an artist, or at least a writer, of immoral art, we should consider the objectionable passage, or scene, not in isolation, but in its relations to the plot as a whole and the total dramatic effect. Moral objections are only too often hasty and unintelligent as literary criticism.

At the same time, Aristotle insists that the artist is justified in depicting moral evil only when it contributes to the dramatic value of his work, and even then should confine it to minor roles and incidents. There is no excuse for portraying "depravity of character where it is not necessary and no use is made of it." Some critics, indeed, have maintained that he would have condemned on these grounds the Satan of *Paradise Lost*, and Macbeth.

**The Nature of Tragedy.** Turning now to poetry, Aristotle tells us that its subject is human character and action considered in their universal aspects. It is therefore the greatest of all the fine arts. In tragedy it finds its highest expression. Tragedy, using song and dance as accessories, sets forth in dramatic, not narrative, form some "serious" and complete human episode, accomplished preferably "within a single circuit of the sun"; and so presents it as to arouse the emotions of pity and fear upon which the sense of tragedy is based, and at the same time to purge them of their unpleasantness.

From the first part of this description flowed the famous doctrine of the "three unities" of plot, time, and place, which dominated, often with absurd results, many French and Italian playwrights of the sixteenth and seventeenth centuries. Aristotle, however, seems to have meant literally only the unity of plot, and to have advised restricting the episode to a single day and a single spot, partly because this practice was common, though not invariable, on the Greek stage, and partly as a warning against prolixity and disjointedness.

A good, unified plot must tell a complete and self-contained story. It must be selective, "with its several incidents so closely connected that the transposal or withdrawal of any one of them will disjoin and dislocate the whole."<sup>21</sup> It may embroider and alter the legendary or historical material from which the Greek tragedians habitually took their plots, but it must always be plausible. It must, however, select and manipulate its subject with an eye to extraordinary surprises and coincidences. Such incidents occurring "unexpectedly, and at the same time in consequence of one another," have "an appearance of design,"

<sup>21</sup> *Ibid.*, 8, 1451 a, 30 ff.

and seem to be "not without a meaning," which arouse wonder and awe in the spectator. And since the story as a whole is one that drives home the fickleness of fortune, the furtiveness of destiny, and the uncertainty of human life and happiness, it surcharges us with the pity and the terror that reflection upon our lot must inspire in every thoughtful man.

**The Catharsis of the Emotions Effected by Tragedy.** But, to be truly tragic rather than merely horrible, a plot must do more than bring these emotions to a head. It must relieve us of their painfulness; not by ridding us of them altogether, since that would destroy the sense of tragedy and render us simply callous, but by turning them into pleasurable experiences. This "catharsis" of the emotions, as Aristotle calls it, is effected by transferring them from our own predicament to the sufferings of the tragic hero. In him, to be sure, we see ourselves, and in his fate our possible doom, and we weep and shudder accordingly. But since his fate does not threaten us immediately, our tears and apprehension are shifted from ourselves to him. This transference from fact to fiction, and from our particular lot to universal human destiny, detaches us from ourselves, releases us from our individual burdens, and, momentarily at least, substitutes for self-pity and personal fear a nobler, all-embracing, impersonal sympathy and compassion. So it is that the depiction of great misfortunes and disasters can and does give *pleasure*, that we *enjoy* the tears we shed at the theater, that we come away saying we have seen a *good* play.

Nay more, this "purging" of pity and terror not only gives esthetic pleasure but raises us for the moment to a higher moral level. We leave the theater feeling the better ourselves for what we have seen. But the moral exaltation his work happens to produce in us is an accidental by-product, so far as the tragedian is concerned. His business is simply to turn the pitiful and the horrible into a thing of *beauty*. In so far as he deliberately aims at teaching us a lesson and improving our characters, he ceases to be an artist and becomes a preacher.

**The Tragic Hero.** To turn a normally painful situation into an esthetically pleasurable or, in other words, into a *beautiful* one, requires careful handling of the tragic hero. To begin with, he must be a person of eminence and in enjoyment of marked good fortune, if his fall is to be striking and truly tragic. The misfortunes, however pitiful, of an obscure or mediocre man are not sufficiently impressive to produce the desired effect. Again, the evils that befall the hero must not be due to pure mischance. Neither must they be the wages of sin pure and simple. The sufferings of the absolutely innocent, or the

execution of an out-and-out criminal, are not tragic; they are merely odious. The hero must be neither too good nor too bad, and his misfortunes must appear "brought upon him not by vice or depravity, but by some error in judgment," due to inexcusable carelessness, or a fit of passion, or some other weak spot in an otherwise upright character. These requirements, critics have pointed out, are too strict from the modern point of view, since they would bar from tragedy the sufferings of a blameless character like Cordelia, or of an essentially evil one like Richard III, Macbeth, and Milton's Satan.

Again, to produce the best tragic effect, the downfall of the hero must be sudden and unlooked for, and accompanied, if possible, by an unforeseen "discovery" or "change from ignorance to knowledge, and thus to either love or hate, in the personages marked for good or evil fortune." At the same time, the *dénouement* must be logically approached by a series of incidents that are caused by one another and also expressive of and true to the psychology of the characters. The more intimately related the characters are, the more tragic the wrongs they do one another. For instance, parricide, matricide, and fratricide, either consciously or unconsciously committed, are especially good material for tragedy.

Needless to say, the tragedian must be a great poet and playwright. He must be a master of poetic diction "at once clear and not mean," and of meter and rhythm. And he must know how to choose and construct a plot, and how to weld both the dialogue and the choral songs and dances into a single compact whole.

**Epic Poetry.** The book ends with a brief discussion of epic poetry. Epic poetry differs from tragedy in not being adapted to stage presentation, in its different meter, and in its greater length. Otherwise its plot should follow the rules laid down for a good tragedy, displaying the same unity, and using much the same devices of catastrophe, surprise, discovery, heroic suffering, and the like. Its freedom from stage restrictions, its superior ability to make the improbable and even the impossible seem plausible, and its employment of the hexameter, give it certain advantages over tragedy. And yet tragedy is really the finer of the two. It is more unified and more concentrated, and the fact that it can be staged and embellished with a song and dance give it a vividness and poetic effect to which epic narration cannot attain. Hence it is the higher form of art.

The second book of the *Poetics*, in which Aristotle discussed comedy, is lost.



## *Chapter XV*

# THE HELLENISTIC WORLD. THE OLDER ACADEMY AND THE LYCEUM

### I. THE HELLENISTIC WORLD

**The Silver Age.** Aristotle and Alexander the Great, dead almost within the same twelve months, were scarcely cold in their graves before the realms that each had subdued and consolidated were falling to pieces. The Empire, which for a tense moment had not only unified Greece and imposed Hellenic rule upon Asia Minor and Egypt, but had promised a synthesis of East and West in a new Alexandrian civilization, was partitioned by the kings and generals, and collapsed into a number of hostile kingdoms ever at war with one another. These, in their turn, gave way to the universal dominion of Rome. In the same way, the philosophic synthesis effected by the genius of Aristotle, who, no less than Alexander, might have wept because he too had no more worlds to conquer, dissolved and was replaced by a medley of lesser systems, which eventually disappeared before the triumphant onslaught of Christianity. Again, both the new politics and the new philosophies had this in common—both were cosmopolitan and eclectic, and in them different races and speculations mingled freely, interchanging and combining different customs and institutions, different points of view, moral, religious and philosophical. Both, moreover, though fecund in talent, were sterile in great genius. The men of gold were gone, and Hellenism had entered upon its silver age. The world was to wait three hundred years for Julius and Augustus Caesar, and nearly three hundred more for Plotinus—the one philosopher of high eminence in post-Aristotelian ancient philosophy.

It is well to dwell for a moment upon the great length of the period we are about to study. Otherwise, seeing it in the perspective of the distant past, and half-blinded to its true duration by the brief brilliance of the preceding epoch, we are likely to foreshorten it unduly.

Greek philosophy flowered and bore its ripest fruit in slightly less than three hundred years—within less time, that is, than separates us from the ascension of the Stuarts in England or the landing of the Pilgrims in America. But from 322 B.C., the year of Aristotle's death, till the closing of the schools of philosophy at Athens in 529 A.D., is a span of eight and a half centuries, which in retrospect takes us today back to the Norman Conquest. All these years philosophy lay dying, in contrast to its swift leap to its extraordinary prime.

**Accumulation of Wealth.** Though the epoch ushered in by the death of Alexander was of silver rather than gold, it was nevertheless lustrous. The loot of Persia and the exploitation of the new conquests had brought great wealth to Greece, produced a class of *nouveaux riches*, and established many large fortunes. Hence, in spite of the consequent depreciation of the value of money and the rise in the cost of living, which, to be sure, bore heavily upon the poor, the new world on the whole was rich. And within forty-five years of Alexander's death the partition of the Empire was complete, and the four great kingdoms of Macedonia, Syria, Egypt, and Pergamus had established a new political stability and equilibrium, and entered upon the path of power and prosperity.

Like their later "cousins," the Italian despots of the Renaissance, these new kings were great patrons of the arts, which now entered upon a second, though comparatively decadent, flowering. Sculpture produced the Victory of Samothrace, the Apollo Belvedere, the Venus of Melos, the Altar at Pergamus. Apelles, the court painter of Alexander, was followed by Protogenes of Rhodes, and by an outburst of portrait, *genre*, and allegorical painting. Statues and pictures now for the first time appeared in private houses as part of the rich and luxurious furnishing and interior decoration that the recent and rapid acquisition of wealth had made possible. Literature too did not lag behind, as Theophrastus with his *Characters* and Menander and the rise of the New Comedy testify. But art like philosophy had become imitative rather than creative, and looked to the past or to the foreigner for its inspiration.

**Alexandria vs. Athens.** Of the cities of the new epoch, Alexandria, founded by Alexander and made by Ptolemy the capital of Egypt, was perhaps the most brilliant. Embellished by the king and his successors, it rapidly became one of the most beautiful and luxurious cities of the age, and the foundation by Ptolemy II of the university and the museum, and of the library whose accidental burning by Julius

Caesar was a major disaster in the history of civilization, made of it a center of learning and culture that vied with Athens, and indeed, in scientific activity, surpassed her. For Athens, though her political importance had disappeared, was still supreme as a seat of learning. She had not only fulfilled the destiny of which Pericles had dreamed—that she should be the school of Hellas; but she was and remained the school of the whole Hellenistic world. To her students and scholars flocked for education and for research, in spite of the rival charms of Alexandria. Even after the Romans had pillaged her, they still looked to her for light. And though philosophers might emigrate to the banks of the Tiber, they still dwelt beneath the shadow of the Acropolis.

**Post-Aristotelian Philosophies.** An outstanding mark of the post-Aristotelian systems is their tendency to become primarily guides to human living and ways of human salvation rather than pursuits of truth for its own sake. The reasons for this reversal are not far to seek. All crystallized theologies and ethics arouse skepticism as well as belief, and Greek theology and ethics were no exception to the rule. Ionia and Magna Graecia, where European philosophy was born and cradled, were free-thinking, and, as early as the time of Xenophanes, the Olympian gods could be criticized and disavowed with impunity, at least in Asia Minor and the Italian cities, and were evidently no longer taken too literally by the philosophers. The Sophistic movement was frankly agnostic regarding the existence of the gods, and had devastating implications for the traditional morality as well. Moreover, in spite of Athenian religious conservatism, the deities of religious orthodoxy were apparently none too seriously regarded by Socrates, and had become poetry for Plato, and for Aristotle not even that. So, too, the ethical reconstructions undertaken by these three philosophers bears witness to the demoralization of traditional standards of conduct.

**The Growth of Theological Skepticism.** After Aristotle, certainly, the growth of skepticism with regard to the religious and moral orthodoxies of the past was irresistible, overwhelming first the educated and thence seeping down to the masses. Fifty years later, Eudemus of Messene was suggesting for the consumption, not of the few, but of the populace, that the gods had a human and historical origin in forgotten kings and conquerors, the tradition of whose greatness lingered on in religious myths. And at an even earlier date the Athenians had welcomed Demetrius Poliorcetes, King of Macedon, with a song in which he was likened to "a true god, not one of wood

and stone" in contrast to "the other gods" who "are a long way off, or have no ears, or no existence, or take no care of us."<sup>1</sup>

But the failing hold of the Olympians upon the imagination and belief of antiquity did not mean a decay of religious and moral aspirations and needs. These needs and interests, choked and dried up in their orthodox channels, worked out new courses for themselves, first by invading the field of philosophy and later by mingling with the influx of oriental cults into Rome.

**Philosophers in Politics.** An interesting concomitant of this change in the temper of philosophy was the restoration of philosophers to political prestige. The Pre-Socratic thinkers, to be sure, had almost all been men who played prominent parts in the government of their cities. But Socrates and Plato had taught, the one in an open and eventually fatal hostility to the political conditions of his times, the other in a more theoretic and less active though in reality no less bitter antagonism to them. Aristotle, in spite of his exceptional opportunities, carefully kept out of politics, and developed his own theory of the state with objectivity and detachment. Now, however, as philosophy was invoked to do the work of religion, the philosopher was called upon to perform the offices of the priest. It was to him that people turned for consolation, advice and encouragement. He began to have his flock to whose spiritual needs he ministered. Even Alexander had had philosophic court chaplains in his train, to whom on one occasion he came to confess and to receive absolution after he had killed his friend Clitus in a fit of rage.

So it was that the philosopher began to assume once more a leading position in the political life of the community, and to be enlisted in the service of the state. Just as in former days Leontini had chosen the Sophist, Gorgias, to head the mission sent to beg help from the Athenians against Syracuse, so now we find heads of the Academy, like Xenocrates and Crates, chosen by the Athenians as special ambassadors to the court of Macedon, and later the presidents of the Academy, the Lyceum, and the more recently founded Stoa, despatched as envoys to Rome.

The re-entrance, however, of philosophers into political life exposed them once more to political vicissitudes. In fact, the Athenian democracy, under the measure of self-government granted it by Macedon, at one time forbade the existence of philosophic schools unless licensed by the Assembly, and went so far as to banish the Peripatetics. But

<sup>1</sup> Ferguson, *Greek Imperialism*, p. 143.

the city suffered so severely from the loss of the money ordinarily spent in the town by the students that the law had to be repealed and the philosophers restored. Thereafter, till the final closing of the Schools, no successful attempt was made to interfere with their freedom of thought and speech.

**Appeal of Philosophy to the Masses.** The rise of the philosophers and their assumption of a priestly role also gave them a larger and more diversified audience. Their appeal to the masses was perhaps due in part to the more popular character of their teachings. The moral support and religious consolation they served up was not fresh and deep-cut, like the ethics of Plato and Aristotle, but warmed-over; and, at that, a re-hash not of Platonic or Aristotelian strong meat but rather of the more easily digested ethics of the Cynics and the Cyrenaics. These, again, were fortified and flavored for popular consumption with the simpler and more easily understood portions of the metaphysics of Heraclitus and Democritus. Perhaps, too, the flavorless quality of the immediate followers of both Plato and Aristotle and of their presentation of their masters' doctrines had something to do with the failure of the two great philosophers to become the leaders of the new age. In any case, it is a fact that they both suffered immediate and almost total eclipse, for the moment, as soon as they were dead. Upon their eclipse we shall do well to meditate a moment before taking up the more positive aspects of post-Aristotelian philosophy.

## II. THE OLDER ACADEMY

Upon Plato's death the leadership of the Academy fell to his pupil and nephew, Speusippus, not because of the latter's philosophic merits but because he was the natural heir to Plato's considerable estate. It was, we may recall, his succession that led to Aristotle's withdrawal from the Academy and to the foundation of the Lyceum.

**Speusippus and Xenocrates.** Both Speusippus and the next head of the Academy, Xenocrates, were, like Aristotle, primarily concerned with bridging the gulf left, in their opinion, by Plato between the intelligible and the sensible worlds. Plato himself, it will be remembered, had had misgivings on this score, and had tried to bring the Forms and the sensible world into communication by using soul as a stop-gap. For this single span both Speusippus and Xenocrates substituted several arches, some of which extended back into the intelligible world itself. Thus Speusippus broke into three separate principles the interconnected, organized, and unified character of the

world of Forms, which for Plato merely indicated its perfection and intelligibility. First came the One or Unity, then, proceeding from it, the Good, and finally, Reason, which Speusippus identified with the Platonic world-soul and the Pythagorean central fire. In this division the Forms disappear altogether, and their place is taken by number, which replaces soul as the connecting link between the intelligible and the sensible orders. The material world itself is founded upon the principle of plurality, or the Platonic the-great-and-the-small. With number Speusippus toyed in a thoroughly Pythagorean and somewhat fantastic manner. He seems, along with Xenocrates, completely to have missed in Plato's discussion of the subject the anticipation of the scientific method of stating the natures of things as mathematical formulae.

Xenocrates treated this hierarchy of principles in a more theological and out-and-out Pythagorean manner than did Speusippus. He regarded unity and plurality as not only metaphysically and mathematically but morally opposed, and from their interaction he derived not only numbers but also the soul. And he carried out in detail the idea of a hierarchy of beings endowed with different degrees of perfection. The heavens, the stars, the Olympian gods, demons or angels, men, animals, and even the material elements partake in a descending scale of the divine soul-principle. He also emphasized the immaterial character of the soul, and accepted, along with Speusippus, the theory of transmigration. Finally, following the lead given by Plato in the *Laws*, he even believed in evil spirits.

**Academy Ethics.** In their ethics both men seem to have moved in the same direction as did Aristotle. Though Speusippus shared Plato's suspicion of pleasure and would not even admit that it played any part in the good, he taught like Aristotle, and like Plato at times, that happiness lay in the perfect and harmonious functioning of all the activities with which nature has endowed us, and that it was dependent to some extent upon external advantages like health, freedom from worry, and the like. Again, like Aristotle, he insisted upon the importance of virtue or human excellence as a means to happiness and an essential ingredient in it. These views were shared by Xenocrates, who developed them at greater length, and also gave to them a theological and Orphic twist by expressing moral conflict as a struggle between the Dionysus within us and our evil heritage from the Titans.

**Other Members and Tendencies.** Other interesting contemporaneous members of the Academy are Heraclides of Pontus and Eudoxus of

Rhodes. Heraclides is noteworthy chiefly for his physics and astronomy. These tended towards an atomism not unlike that of Democritus, and recognized the immobility of the fixed stars, the spherical shape of the earth, and its rotation upon its axis. Eudoxus is best known for his acceptance, even as a member of the Academy, of the Cyrenaic hedonism, which Plato was doing his utmost to combat.

With Polemo, Crates, and Crantor the School fell more and more under the moralizing tone of the age, but remained on the whole true to the ethics taught by Speusippus and Xenocrates. Finally, under the leadership of Arcesilaus, it became, ironically enough, a champion of the same destructive and skeptical attitude as Socrates and Plato had done their best to oppose in Protagoras and his followers. We must, however, postpone for a moment our discussion of this new phase, and hie us back to the fortunes of the Lyceum.

### III. THE LYCEUM

**Theophrastus.** Were Theophrastus, Aristotle's immediate successor, not so overshadowed by his master, he would probably cut a larger figure in the history of philosophy than he does. He shared to the full Aristotle's universality of interest, insatiable and omnivorous curiosity, unflagging devotion to scientific inquiry and to the pursuit of truth, tireless zeal in collecting and reviewing evidence of all sorts from all sources, and power of keen and discriminating analysis and inference. He wrote voluminously on logic, metaphysics, physics, natural history, botany, zoology, psychology, ethics, politics, rhetoric, art, and music. In conjunction with his fellow-Peripatetic, Eudemus (to whom the *Eudemian Ethics* is attributed by many critics), he was the first to amplify the syllogism into its hypothetical and disjunctive forms. The difficulties he found in the Aristotelian metaphysics bear witness to his ability as a critic and as a speculative thinker. His treatises on botany are considered by some to surpass in scope and method all other studies of the subject both in ancient and medieval times, and his famous *Characters* testify to his eminence as a man of letters. But in the end he contributed little that was new to either Aristotle's scientific research or philosophy.

**Criticism of Aristotle.** At the same time, we may perhaps find some evidence of the changing conditions and attitude towards life in Theophrastus' criticism of Aristotle. In the doubts, for example, that he casts upon the major role assigned by Aristotle to design and purpose in the course of events, and in his inclination to make the soul

even more dependent upon the body than did his master, we may detect a more naturalistic spirit. His ethics, too, dwelt more upon external circumstances, not indeed as necessary elements in happiness, but as real disturbers of peace and quiet and as obstructions to the pursuit of knowledge and the living of the contemplative life in which happiness consists.

**Eudemus.** Of Theophrastus' contemporary, Eudemus, we need not speak further. His fame rests upon his reputed authorship of the *Eudemian Ethics*, which, however, is regarded by some critics as a youthful work of Aristotle's, and of which we have already treated in discussing the Aristotelian theory of morals.

**Strato.** The next head of the Lyceum was Strato of Lampsacus, a scientist of much the same universal interest as Theophrastus, and, perhaps, of even greater ability. In him the naturalistic spirit implicit in Aristotle, and more explicit in Theophrastus, comes into the open. The Aristotelian Unmoved Mover, however, disappears altogether from the scene, and his place is taken by nature, regarded, in the manner of Democritus, as a mechanism actuated by necessity. For Democritus' atoms, however, Strato substituted heat and cold as the elements of which all things are made. Furthermore, he denied Aristotle's distinction between the sensitive and the rational souls, and, if his criticisms of Plato's *Phaedo* had any effect upon his own opinion, he can scarcely have believed in immortality. The soul is, to be sure, a force, with a distinctive character of its own, but it is a force lodged in the body, without which it cannot be exercised.

After Strato, the Lyceum deteriorated rapidly. It fell a victim to the ethical and practical spirit of the times, and lost even its leading position as a school of scientific research. But it was still of value as a repository of the scientific knowledge accumulated in the past, and it kept alive the spirit and the letter of Aristotle's moral teaching.



## Chapter XVI

# THE EPICUREANS

### I. LEADERS OF THE SCHOOL

**Epicurus.** Epicurus, though the son of an Athenian citizen, was born on the island of Samos, in 342 or 341 B.C. He was, then, twenty years old when Aristotle died. He claimed that he was entirely self-taught and self-made, but tradition has it that his father was a school-master, and gives the names of the philosophers under whom he studied the systems of Democritus and Plato. It is said, too, that he was for a time a pupil of Xenocrates. His poor literary style, however, his almost Socratic scorn of the higher reaches of education, and his ignorance in many matters make us suspect that his early training, wherever it may have been obtained, was not all it might have been.

After several years of teaching school in various towns of Asia Minor, he moved to Athens (about 306 B.C.), where he purchased a garden, destined, as the famous Garden of Epicurus, to take its place in the history of philosophy beside the Academy of Plato and the Lyceum of Aristotle. There he began to expound his system and to gather about himself disciples. There, too, walled also within the garden of thought he had constructed, full of cool and quiet and peace of mind, he spent the rest of his life not only teaching, but writing with a diligence that made him one of the most voluminous writers of antiquity. Unfortunately only fragments of his work, and these for the most part unimportant, have come down to us.<sup>1</sup> In 270 B.C. he died of a painful illness which he bore calmly and courageously.

The charm of Epicurus' personality, his kind and friendly disposition, the liberal character of his ethics, and the consolations his teaching not only promised but seems to have afforded, gave him a large and immediate following. They imparted, too, a vitality and a power of survival to the school that enabled it to meet with success and equanimity the bitter attacks, both of the other philosophies and later

<sup>1</sup> Our knowledge of Epicurus himself is chiefly derived from Diogenes Laertius, Cicero, Seneca, and Plutarch.\* Epicureanism is fully expounded by Lucretius.

of Christianity, and to remain intact until ancient philosophy itself came to an end. It was in Rome that Epicureanism achieved its greatest fame. Transferred thither within fifty years of its founder's death, it rapidly gained numerous disciples, and within another two hundred had inspired Lucretius' poem *De Rerum Natura* ("On the Nature of Things"), which contains, in spite of the difficulties of the subject, some of the finest poetry not only in Latin literature but in the literature of all time.

**Lucretius.** Of Lucretius, who ranks with Epicurus himself in the history of the sect, we unfortunately know very little. He was born early in the first decade of the first century, B.C., of unknown parents, and lived his own life in retirement and obscurity. He was an invalid, and suffered, it is said, from intermittent fits of insanity provoked by the use of love-philters. Eventually, when scarcely forty, he committed suicide, leaving his poem almost but not quite finished. Either he, or his friends, brought the *De Rerum Natura* to the attention of Cicero, whom Lucretius seems greatly to have admired, and by him, after the poet's death, it was edited and published as it stood in 54 B.C. Of the immediate reception it was accorded we know nothing. But in the next generation we find it recognized as a masterpiece and constantly imitated by Virgil and studied by Horace and Ovid.

## II. THE EPICUREAN ETHICS

**Epicureanism a Philosophic Substitute for Religion.** Epicureanism, being a philosophy of salvation, was primarily interested in offering for a fading religious faith and a failing traditional morality a philosophical substitute founded upon reason and natural sanctions. Its end was to give a peace that the world as it stood could not give, and that, whatever it might bring, it could not take away. With any other goal than the securing of human happiness—with metaphysical or even scientific speculation, with the arts, with learning and culture, even with mathematics—Epicurus had no patience whatsoever. Philosophy is first and last a practical activity—is behaving, speaking, and thinking in the way that makes you happiest.

To discover, however, the happiest way of life, we must first ask again the old question—What is happiness? His answer, Epicurus liked to think, was without debt to the past, but the influence of the Cyrenaics is too obvious to be denied. With Aristippus' doctrine that pleasure is the end at which all moral activities aim, we are already familiar, as we are also with his effort to maintain the goodness of

pleasure apart from its sources and consequences, and to uphold the impossibility of comparing pleasures as better or worse. In this Epicurus followed him, accepting pleasure as the end to which all else, including virtue itself, is only a means. Furthermore, he believed that all pleasure was in the end physical, and, indeed, being himself somewhat dyspeptic, considered the most fundamental enjoyment to be the pleasures of a good digestion.

**Happiness and Pleasure.** But Epicurus could not see eye to eye with Aristippus in so far as the equality of all pleasures in point of goodness and their detachment from their sources and consequences were concerned. For that matter, neither could the later Cyrenaics. Happiness, Epicurus said, is a matter of the greatest amount of pleasure in the long run. The attainment of this balance will often involve both the enduring of pain for the sake of pleasure to come and the sacrifice of such present enjoyments as are more than offset by their painful results. Furthermore, intelligence and reasoning are necessary to weigh pleasures against pains and *vice versa*, and to determine what are and what are not worth foregoing or enduring. This appeal to reason rather than to sensation as the criterion of pleasures and pains that are worth while was also allowed by the later Cyrenaics, and was for them, as for Epicurus, the mark of the wise as contrasted with the foolish man.

**Pleasure as Absence of Pain.** So far, then, Epicurus follows the disciples of Aristippus in their correction and development of their master's teaching. Now he diverges from them, and Epicureanism as distinct from Cyrenaicism begins. Curiously enough, the signpost at this parting of the ways is to be found in his insistence that the greatest of all pleasures is the enjoyment of a sound digestion. For when is digestion at its best? Precisely when we are least aware that it is in progress. The pleasures of digestion lie in *an absence of pain* rather than in anything positive. This negative twist Epicurus gives to the concept of pleasure in general. Pleasure is essentially absence of pain.

His reasons for so conceiving enjoyment are not far to seek. Positive pleasures are enjoyed only at intervals—and we have often to wait a long while for them to occur. Between times we jog along in a condition that is neither positively pleasurable nor painful. If happiness lies in the experience of even a balance of positive pleasure, it is a spotty and sporadic affair, separated by long stretches of unhappiness. But, as a matter of fact, we do not feel unhappy when we are not experiencing pleasure. On the contrary, we are quite content. Hence if the human good is to be identified with pleasure, we must extend the

meaning of pleasure in general so as to cover these long neutral intervals, and must define it more broadly as absence of pain. Enjoyment, then, is essentially comfort. When we are not uncomfortable we are in a pleasurable condition. Nay more, positive and, more particularly, violent pleasure tends to be upsetting and disturbing, and is therefore often more destructive than conducive to happiness.

**Ataraxia.** To pleasure thus defined as absence of desire, of physical discomfort, and of mental disturbance, Epicurus gives the name of *ataraxia*, which we may translate as "serenity," or peace of mind and body. It has, he seems to feel, a sounder psychological and physiological basis than positive pleasure, for it denotes a state of repose and equilibrium in the organism, whereas keen enjoyment is based upon motion and unrest. Furthermore, it is something that does not lie at the end of a long struggle for attainment, but may be ever present and immediately enjoyed. It is supremely worth while, and it is within the reach of all. The good is not a distant or a difficult goal, accessible, if at all, only to a few. All men can be happy, almost without effort, if only they will. For all men can cultivate the amenities of life, and to a large extent can avoid its disagreeable aspects. Furthermore, when the disagreeable cannot be dodged, it can at least be endured with cheerfulness and equanimity.

**The Sheltered Garden of Epicurus.** The Garden of Epicurus is, therefore, a fitting symbol of his ethics. Happiness for him is a walled and sheltered thing, attained by shutting one's self away from all that is harsh and uncomfortable and upsetting in existence. This we can accomplish both by practical measures and by the cultivation of a mental attitude. Courage and temperance are the two great wind-breaks that protect the garden of the soul from the rude and icy blasts of life. Friendship and conviviality are its flowers. Upon the place of friendship in happiness Epicurus set great store. Not only must his disciples love one another, but they should have a philanthropic feeling for all mankind. This insistence upon devotion to one another and upon general amiability was, if anything, overdone by the school, which was reproached with a somewhat too sugary sweetness and gentleness of attitude.

In spite, however, of the importance he attached to sociability, Epicurus discouraged participation in political life. The wise man will disdain wealth, worldly honors, prestige, and the plaudits of the crowd. He will prefer to live in quiet retirement, avoiding the burdens of the citizen, and taking no part in the affairs of the state. Even wife

and child may be distracting, though here, as in other relations imposed upon him by membership in society, he must perhaps gamble on their not too greatly interfering with his peace of mind.

### III. THE EVILS OF RELIGION

But the disturbers of human peace are not altogether of the natural order and of this life. Above all, man is haunted and his *ataraxia* is hounded by two supernatural and superstitious terrors—the fear of what may lie beyond this life and that of the spying, prying eye and heavy, interfering hand of the gods. These terrors are the arch-destroyers of man's happiness. Some of the most dramatic passages in Lucretius are devoted to reciting and depicting the evils that follow in their train—the cringing before the supernatural, the sense of being spied upon, the uncertainty of what the gods may do, the dread of what may befall us in an unknown after-world. Others are consecrated to reassuring us, and to removing our uneasiness, our sense of helplessness in the grip of supernal powers, our panics of prayer and placation, and our fears of what death may bring, by showing us the groundlessness of the belief in immortality and in a divine government of the world. The horrors of death do not exist for the dead, but only for those they have left behind. The dead know nothing of the funeral pyre or the grave, nothing of the mourning and the lamentation. They rather sleep a sleep from which nothing can arouse them. Why, then, should we find death terrible? It is as natural as life. It is the gate to unbroken peace. It is the road down which high and low alike have gone for countless generations. Why should we shrink from treading it, too, and from entering with them into everlasting rest?

### IV. METAPHYSICS

If man is to be freed from the superstitious fears engendered by religion, the non-existence of a providential government of the world and of a life beyond the grave must be established beyond doubt. For doubt on any subject is itself a disagreeable sensation, threatening to our peace of mind. Particularly disturbing is the suspense aroused by a sneaking suspicion that religion may after all be really right, for all we *know*. Hence if we are to be happy, we must have *scientific proof* that its teachings are groundless. Such proof Epicurus finds in the philosophy of Democritus, whose mechanical and atomistic system left no place, we may remember, for a moral government of the world

or an after-life. This system Epicurus took largely on faith because it suited his scheme of salvation.

**Epicurean Modifications of Atomism.** In taking it over, however, Epicurus made several changes in it. In the first place, it seems probable that he added the characteristic of *weight* to the two characteristics of size and shape to which Leucippus and Democritus apparently had limited the atoms.

Again, whereas Leucippus and Democritus apparently conceived the atoms as moving helter-skelter in all directions, Epicurus thought that, because of their weight, they would naturally fall perpendicularly through space. This view, however, involved him in difficulties. Since, in his opinion, empty space would offer no resistance to the falling atoms, there was, he felt, no reason for the larger and heavier atoms to fall faster than the smaller and lighter ones. But in that case, the heavier could not overtake the lighter, and collisions between them could not take place. Hence there could be no clusterings of the atoms to form larger masses, nor, without collisions and the consequent deviations from the perpendicular, could atomic whirlpools be set up in the Void, and worlds be brought into being.

**The Spontaneous Deviation of the Atoms.** To get round this difficulty, and it may be in part for moral motives to which we shall come in a moment, Epicurus advances the idea that besides a natural tendency to fall vertically, expressive of their weight, the atoms also possess a characteristic of *spontaneous deviation* from the perpendicular. This characteristic is independent of the fixed properties of the atom, such as its size, shape, and weight. The spontaneous swerving of the atoms, moreover, introduces an element of freedom into their movements and collisions and into the resultant world-systems. For their clusterings and motions are not absolutely determined by their fixed properties and by their antecedent situations and lines of movement, as they were in the systems of Leucippus and Democritus. The course they will follow cannot be computed since they are not bound absolutely by the laws of mechanical motion, and move to some extent in an unaccountable way. In short, Epicurus rejects the absolute *necessity* and the *determinism* to which Leucippus and Democritus had subjected all movement and change, and injects into the behavior of the atoms a factor undetermined by their antecedent arrangements and movements.

As we have just said, Epicurus may have had moral as well as scientific reasons for his doctrine of *spontaneous deviation* as it stood. The philosophy of Leucippus and Democritus might indeed liberate

us from the fear of God and of death, but as it stood it also substituted for the tyranny of a divine providence that minded and managed all our business for us another tyranny no less irksome and terrible—the rule of an inexorable necessity which held us in an iron grip, determined all our acts, ran our lives in every detail, and blindly dispensed to us happiness or misery. It is preferable, he thinks, to believe in the fables about the gods than to be enslaved to the determinism of the physicists. These fables leave us some hope of wheedling the gods by prayer and placation, but necessity is implacable. The terrors aroused by the idea of blind destiny are even more disturbing to our *ataraxia* than are those inspired by belief in a divine providence.

The spontaneity of atomic behavior, moreover, validates man's feeling of freedom and his desire to manage his own affairs. It liberates him, as it does the atom itself, from the heavy hand of destiny. His sense of being actuated and directed by himself alone proves to be no illusion. It springs rather from the very heart of things of whose ungoverned and irregular beating it is the conscious expression.

#### V. THE FREEDOM OF THE WILL

Upon the human freedom and moral responsibility to which he considers himself to be thus giving a physical basis, Epicurus cannot insist too strongly. Of two contradictory propositions, particularly when they refer to the future, neither, he tells us, is necessarily true at the present moment. One of them may *become* true, to be sure, but it is not necessarily so before the event. Prediction, prophecy, sooth-saying, are vain. There is no foretelling how men will act or what will befall them. So, too, we alone, not God or necessity, are the causes of our acts. Nor can any external event or person invade our privacy, infringe upon our liberty, or rob us of our happiness. We are masters of our fate, immune alike to destiny and chance. Chance, to be sure, springs from the same source as does freedom. External events are to some extent incalculable, because they, too, reflect the spontaneous deviation of the atoms. Their incalculable character makes us speak of the fickleness of *fortune*, and of *luck*, good or bad. But our inner liberty, in which the same spontaneity displays itself, is not a thing of inexplicable vagaries. It is power over ourselves, ability to will and act on our own initiative. This power is at the mercy neither of inner caprice nor of external hazards.

## VI. EPICUREAN RELIGION

In denying the existence of divine beings to whom the secrets of all hearts were known and who directed human affairs, Epicurus did not, however, banish gods from the universe. Like Democritus, he seems to have accepted their apparition in dreams and visions as sufficient proof of their existence. For him as for Democritus these visitations could be explained only as a stirring of the soul-atoms by effluences from existent external objects. There were, then, gods in the worlds—at any rate in our world. But they were powerless to interfere with human destinies; if indeed they so much as knew that man existed. But if we had nothing to hope from them, at least we had nothing to fear. They dwelt far off in the serene interstellar spaces, leading there the happy, carefree, amply provided life of which man dreams. Spun like ourselves from the whirling atoms—though from a finer stuff than ours—they were not uncreated and indestructible, but their existence was everlasting compared with the brief span of human life.<sup>2</sup>

Furthermore Lucretius seems to have found religious value in the spectacle of infinite atoms falling through infinite space throughout infinite time, forever generating and destroying in the Void by their falling an infinity of worlds. "The walls of the world," he says, "part asunder. I see things in operation throughout the whole void. . . . At all this a kind of godlike delight mixed with shuddering awe comes over me to think that nature . . . is laid thus visibly open, is thus unveiled on every side."<sup>3</sup> And the *De Rerum Natura* is infused with religious veneration for the vision he has been vouchsafed of the true nature of things, and with exultation that it has cast out fear from man's heart and given him peace.

## VII. THEORY OF KNOWLEDGE

To defend his system against the attacks of the skeptics Epicurus had to show how the mind could know the nature of things, and to do this he had to develop a theory of knowledge. Here he is influenced both by the Cyrenaics and by Democritus himself, who had developed his philosophy under fire, and had sought to entrench it in rational grounds against attack. With the Cyrenaics, Epicurus agrees that

<sup>2</sup> Cf. Lucretius, *De Rerum Natura*, I, 1014 ff.; III, 18 ff.; V, 146 ff.

<sup>3</sup> *Ibid.*, III, 15 ff.



sensation is the test of truth, as it is of good and evil. For, if perception cannot be trusted, what can be? Impressions are what they are, and there can be no gainsaying them. Moreover, the rest of our thinking is derived from sense. Repetition of the same impression gives rise to a remembered image, which we call a notion. Notions give rise to opinions. And those opinions are true that are in correspondence with the external world.

To establish such correspondence Epicurus invokes Democritus. Impressions are produced by the impact upon the sense-organs of miniature copies or pictures of external objects, which these objects are continually throwing off from themselves. If the pictures arrive intact, we get true and faithful images. If, however, they meet with accidents *en route*, by collision or otherwise, they present us with false or distorted pictures. Further than this Epicurus does not go.

#### VIII. THEORY OF SOCIETY

**Primitive Human Social Conditions.** The fifth book of Lucretius' *De Rerum Natura* is devoted to setting forth the Epicurean view of the origins of life, of man, and of human society. First the earth grew vegetation, much as animals grow hair, and heat and moisture generated animals. Then she brought forth man from innumerable wombs of her contriving. Monstrous forms of life died out because they were unsuited to their environment and unable to perpetuate their species. The monsters of mythology, however, never existed, and are fables pure and simple. In the beginning, man led a purely animal existence, completely at the mercy of natural forces. After a while he got control of fire, learned to cook and to fabricate clothes and shelter, and transformed little by little his inarticulate cries into speech. To this epoch belongs the dawning of tribal and social existence. Agriculture was now undertaken, animals were domesticated, the use of metals was discovered, and wealth came into being and began to accumulate. Social organization grew, and government evolved as natural inequalities in strength and talent fostered class distinctions and brought about the rule of chiefs and kings. Then music appeared, modeled on the songs of birds, and mirth and merry-making, and the appeal of beauty. And so, step by step, men advanced to their present state of civilization.

The Epicureans felt that the state, and with it law and the concept of justice, appeared as natural developments of social evolution. In this, they were opposed to popular contemporary theories, dating back

to the Sophists, and advanced by politicians like Callicles and Thrasymachus in Plato's *Republic*, by the Cynics and Cyrenaics, and by the new Skepticism to which we shall soon be turning. According to these views there is no such thing as natural right, and the lawful and the unlawful are mere matters of convention, founded upon and backed by might. To these assertions the Epicureans replied that the state is in a sense artificial in that it is a conscious creation, organized with an end in view. But the creation, the end, and the means are indicated by nature. In their primitive state men do, to be sure, prey upon each other. But it takes little reflection to see that such a condition is contrary to man's self-interest, which is best subserved by a reciprocal agreement among individuals to live at peace with one another. So, in the common interest, a compact is made not to injure, in return for not being injured. This compact is the basis of what we call natural right,<sup>4</sup> and of what we call justice, and of law. Apart from such a compact, none of these terms would have any meaning. In that sense they are conventional. But the compact is a natural product, growing out of the natural desire for self-preservation and self-assertion inherent in the individual, and for protection in the pursuit of his own ends.

**The Nature of Right and Wrong.** It follows that right- and wrong-doing are entirely a matter of consequences. Hence law is primarily concerned with preventing the suffering of evil rather than the doing of it, and takes heed of the wrong-doer only in so far as his deeds affect others. Nevertheless, the individual is well advised not to do wrong even if he thinks he can avoid the consequences. For, though punishment is not certain, it is always possible, and the lawbreaker, although he may escape, must live in perpetual suspense and fear of detection and arrest. Hence the wise man, who values his peace of mind, will steer clear of the police by observing the law and refraining from acts considered unjust.

Justice, however, is not a fixed but a fluid thing. It varies with time and place and circumstance. In a sense it is the same for all, since it represents a common social need. But what is just for one man is not necessarily just for another. Nor is what is just at one epoch necessarily always so. Law, if it is to command respect and obedience, must follow and reflect the changing standards of changing times. Otherwise it does not prescribe what is right but may even enjoin what is wrong. For right and wrong are relative to whatever happens to be

<sup>4</sup> Diogenes Laertius, X, 150.

the organization and interest of society as it is, not as it was, or as it perhaps will be.

In this fashion, it has been pointed out, the Epicureans took a middle and sensible path between the moral conservatives and the moral radicals of their age. Since individuals have in all times and places much the same make-up, there will always be a fund of enduring interests and standards handed down from generation to generation in the form of unchanging conventions and laws. But there will also be diversities of interest, and hence of justice and law, varying with time and place and adapted to special circumstances.<sup>5</sup>

Lucretius was the last Epicurean of any note, but Epicureanism was still so strong in the second century A.D. that it was established as one of the Schools of Athens.

<sup>5</sup> Cf. Guyau, *La Morale d'Epicure*, p. 149.

## Chapter XVII

# THE STOICS

### I. THE GREEK FOUNDERS. THE OLD STOA

In contrast to Epicureanism the history of Stoicism presents a confused and varying spectacle. The doctrines of the one were simple and consistent, and, once promulgated, descended unchanged through the centuries. The teachings of the other allowed of wide diversities of opinion on fundamental problems, and underwent important alterations in the course of time.<sup>1</sup> Like Epicureanism, however, Stoicism was primarily a scheme of salvation and a way of life, concerned first of all with defining the nature of human happiness and discovering the means to its attainment.

**Zeno.** In its case, moreover, the moralizing tendency was perhaps intensified at the beginning by the personality of Zeno, the founder of the School. A native of Cyprus, he emigrated to Athens about 320 B.C., where he, like Epicurus, studied under Xenocrates. His temperament was attracted to the Cynic doctrines of virtue for virtue's sake, the unconquerable soul, and the independence of happiness on external conditions. These teachings, and the sect's missionary zeal in trying to reform what they considered the wickedness of the world, were congenial to his severe, didactic and proselytizing temperament.

He was, however, dissatisfied with his first teacher, Crates, and with the unadulterated Cynicism taught by him. But he found what he desired in the Cynic Stilpo, who had come under the influence of the Megaric school, adopted its Eleatic method of logical argument, and accepted its identification of the Socratic Good with Eleatic Being.

After some twenty years of study he launched out for himself, delivering his lectures in a colonnade known as the Stoa Poikile, or

<sup>1</sup> The fragments of the writings of the older Stoics have been collected and published by J. von Arnim (Leipzig, 1903-1905). Valuable sources may also be found in Diels's *Doxographi Graeci*. The teachings of Panaetius and Posidonius have been preserved, thanks largely to Cicero's translations or adaptations in his *De Officiis* and his *De Deorum Natura*. The works of the later Stoics are for the most part extant. No attempt at detailed references has been made in this chapter, except in the case of direct translations.

Painted Porch, whence the name Stoic is derived. The uprightness of his character and life won for him great respect both in Athens and abroad. Eventually, having received a physical injury, he felt that his hour had come and committed suicide. The exact date of his death is unknown. Only a few of his prolific writings have come down to us.

**Cleanthes.** At his death, the leadership of the School fell to Cleanthes, from Assos in the Troad, the sister or niece of whose reigning prince, we may remember, Aristotle married. He is said to have been originally a prize-fighter, and was distinguished more for solid worth than for keenness of intellect. He embraced the teaching of Zeno with religious fervor, gave to it a theological twist, and has left us an important legacy in his *Hymn to Zeus*. By this time the School was well established, and history mentions many of its adherents, of whom the most prominent was perhaps Eratosthenes the Grammarian, head of the great Library at Alexandria and tutor to the crown-prince, under Ptolemy III.

**Chrysippus.** Cleanthes was succeeded by his pupil Chrysippus, born in 280 B.C. in Cilicia, near Tarsus. Though he lacked originality, he was a man of great learning and a master of argument. He ably defended Stoicism against all comers, and particularly against the Epicureans and the attacks of the new, skeptical Academy. It is to him we owe the consolidation of Stoic doctrine along the lines that characterized it for the rest of its existence. With him the first period of Stoicism, known as the Old Stoa, came to a culmination and an end. At the same time, we shall find that Stoicism could not hold its lines absolutely intact against the pressure of its critics and the exigencies of practical life. In the course of time, as we shall see, its sharper salients were flattened by the Epicurean teaching, and the common cause that it found itself making, willy-nilly, with the Academy against this common foe also helped modify its more extreme positions. The result was that it tended, particularly after it had gone over to Rome, to become self-critical and eclectic, and to be accepted by its later disciples in part and in combination with elements from other systems.

## II. THE STOIC ETHICS

**Divergence from Epicureanism.** Let us, however, pause at this point to survey the doctrines established by the Greek founders of the school, before tracing their further history. And, since Stoicism like Epicureanism was primarily a way of life, let us begin with its ethical aspects. At the outset we may note its wide divergence from the way chosen

by Epicurus. He had sought peace by assiduously cultivating the amenities of life and shunning its disagreeable aspects as far as possible, though he was prepared to bear evil with a courageous and even mind when it could not be avoided. But his rule was to dodge the disagreeable rather than to face it. The Stoics, to be sure, also strove for freedom from disturbance, but the calm they tried to attain was of a different sort, and was to be reached by different means. Cultivation of the pleasant and avoidance of the painful were not conducive to it. On the contrary, they were detrimental. For both alike made happiness to some extent dependent on external circumstances. They put man in the power of the world and deprived him of self-mastery. Peace of mind lay rather in absolute independence of fortune, good or bad, and the secret of independence lay in the cultivation of an absolutely indifferent attitude towards both her caresses and her stings. Thus and thus only, by an unyielding, unruffled endurance of the vicissitudes of life, can we triumph over them and preserve ourselves intact, whatever may occur.

**Apathy.** This "apathy," as the Stoics called it, is fostered for its own sake and is its own reward. It is an end, not a means, to anything beyond it. Nay more, it is *the* end—the supreme goal towards which all human activity, if rightly disciplined, is directed. Happy, then, he who possesses it, since happiness also is that which is desired in and for itself, and is the target at which moral conduct is aimed. In a word, to be virtuous is to be happy and *vice versa*. Happiness and virtue are one and the same thing.

Furthermore, this attitude is that of the wise and reasonable man. It is the *rational* way of meeting life, and the independence and indifference that go with it are in their deepest aspects an indifference of the rational part of us, or *ruling principle*, as the Stoics call it, to the passions, desires, and emotions aroused by our contact with other persons and external objects, including our own bodies. Hence virtue, happiness, and rational living are identical.

Again, though "apathy" is a passive acceptance on our part of whatever befalls us, it is a state maintained only by constant effort and tension. We have to *will* the independence dictated by reason, and constantly to oppose that will to the innumerable forces that tend ceaselessly to break it down. The ruling principle in each man is, then, also a *strength* of mind, a *determination* to remain untroubled. This, in its turn, implies a conviction that nothing is really evil or to be avoided except as we allow it to become so through a weakening of that determination.

**Stoic Austerity.** The teaching that virtue lies in insensibility or "apathy," that it is desired for its own sake, and that it is identical with happiness and the good, led the Stoics, as it led the Cynics, to austere conclusions, in theory at least. Cleanthes, like Antisthenes, found himself obliged to include in his denunciation of all pleasure as contrary to nature even the pleasure of being good. All the emotions were equally taboo, since they were all irrational, and therefore ran counter to the ruling principle, whose right estimate of good and evil they tended to confuse with false images of pleasure and desire, and anxiety and fear. This theoretical suppression of all feeling, including as it did generous emotions like sympathy and pity, aroused immediate criticism, and invited the charge that Stoicism was hard-hearted.

Furthermore, the Stoic was forced to maintain that whatever a man did was right, granted his heart, so to speak, was pure, or, in other words, insensible. Virtue was a matter of the will, not of the deed. Conversely, no matter how excellent in its consequences an act might be, unless it was performed with an absolutely right intention, that is, with absolute indifference, it was wholly wicked. This view also was criticized, and ridiculed as well. Was it right, for example, to commit adultery in a disinterested manner, and therefore with honorable intentions? Was it a deed of darkness to follow the irrational impulse to save a life you saw in danger?

**No Variety or Degrees of Virtue.** Again, logically speaking, there could be no such thing as a number of different virtues. It was not merely that the virtues were one in the Socratic sense of being all reducible to knowledge of what is best. To misjudge in one department of conduct was to betray an incapacity for right judgment in any and all departments, and marked a man as a fool and a knave all over. You were either ruled by reason and therefore virtuous in all respects, or you were not ruled by reason and therefore vicious through and through. So, too, there could be no *degrees* of virtue or vice. You could not be more or less rational, more or less insensible, more or less independent. You either possessed the good will, the right intention, the Stoic attitude, or you did not. To be sensible of so much as a pin-prick was to be not insensible, and therefore not good, and therefore simply wicked. You were completely saved or wholly damned. And that was that.

It followed that there could be no such thing as real moral progress and improvement. There could be only sudden and total *conversion* from absolute folly and wickedness to complete righteousness and wisdom. We are changed from evil to good, not slowly, but in the

twinkling of an eye; and until then, we still belong to the ranks of the lost, no matter how valiantly we may be struggling to be good.

**Total Depravity.** Like the Cynics, the Stoics were also obliged by their theory to take a pessimistic view of the condition of mankind. Social institutions and the conventions and standards of so-called moral behavior between individuals were all contrary to nature, and menaced rather than supported the maintenance of that inner "apathy" in which true virtue and happiness alone consisted. Those who allowed their conduct to be influenced by these standards and conventions were all wandering in outer darkness. Salvation was reserved to the Stoic sage alone. The human race was almost entirely in a state of total depravity, utter folly, and complete unhappiness.

Naturally such a theory could no more stand up against hard fact than could Aristippus' devotion to the pleasure of the moment as the highest good. Almost immediately we find the Stoics engaged in the concessions and modifications that made of their philosophy, in the end, a workable system by which human beings were inspired and consoled in their dealings with themselves and with the world.

**Concessions to the World.** The unity and the self-sufficiency of virtue remained, indeed, a persistent and cardinal principle of the School. But Zeno himself had been forced to mitigate the doctrine by recognizing that the four classic virtues of temperance, courage, wisdom and justice were at least four distinct ways of exhibiting one and the same righteousness. And both Zeno and Cleanthes had described the "daily duties," or proper performance of "that which it comes in one's way to do," which are incumbent upon the sage as the result of living and moving in a surrounding world. Indeed, by the time Stoicism passed over to Rome, temperance, or propriety in human relations, had taken precedence over the self-centered courage preached by the Cynics and the private wisdom emphasized by Zeno, as the most revealing expression of the rightly directed will.

Moreover, even the individual man, being after all human, had instinct and feelings as well as reason, and lived not in a vacuum but in a material environment. The concept of the right attitude had, therefore, to be broadened in its inner aspects by admitting that the instincts and the emotions were not always antagonistic to right living, and that external circumstances might have value, provided that they were kept in submission to the ruling principle and not allowed to get the upper hand.

**A Middle Ground Recognized.** Again, the uncompromising distinction between good and evil, wisdom and folly, was softened by the



admission of a third class of things—those that are neither good nor bad but merely indifferent, and have no bearing upon virtuous or vicious conduct. To this class belong a host of trivial actions, whose performance demands no examination of the conscience, and also many things which in some circumstances are to be preferred, in others to be avoided. Consequently it had to be admitted that there were real *degrees* of virtue and of vice, and that instead of having to be suddenly converted from a state of total depravity to one of perfect goodness, a man could progress step by step from the one condition to the other. Nor could a hard and fast line easily be drawn between advance towards virtue and attainment of it, since moral improvement is itself a good thing. For that matter, though Cleanthes still maintained that once saved a man could not fall from grace, Chrysippus admitted that the sage was capable of backsliding and could never be too sure he was not doing so.

The concessions made by the Stoics to political and social organization seem to belong largely to the later, Roman period. Zeno adhered to the Cynic view that such organization is altogether artificial and conventional and that in an ideal society composed of perfectly virtuous men there would be no marriage, no family organization, no church, no judicial procedure, no government, no money. And Chrysippus advised abstinence from all political activity. Nor did Stoicism, even under Roman influence, ever give ground to the point of admitting any positive worth to social institutions. At the best they were to be shouldered as part of the human burden. What Roman Stoicism did do, as we shall soon see, was to give real content and value to the incipient notion of the brotherhood of man, inherited from the Cynics.

### III. THE STOIC METAPHYSICS

**Rationality of the Universe.** But if it is reasonable for us to accept with an untroubled mind everything that occurs—and this remained till the end the essence of the Stoic way of life—it must be reasonable for everything to happen as it does. To regard external events as irrational would be to regard them as evil in themselves, irrespective of our attitude towards them. In that case, our acceptance of them would not be a willing one. It would be rather a forced compliance, which would make man the victim, not the master of his fate, shackle his inner life to the chain of external circumstances, and deprive him of his inner, essential freedom and dignity.

The Stoics, then, had to feel that the universe responded to our

reason's voluntary acceptance of it, by being itself a rational affair. To support their attitude, they needed like the Epicureans a congenial metaphysics. This they found in the system of Heraclitus, just as the Epicureans took refuge in the philosophy of Democritus. What chiefly attracted the School to Heraclitus was his doctrine that the ever-changing Fire was infused with "the wise" and exhibited in its ceaseless alterations an order which reason could discover and grasp.

**The Stoic Logos and Pantheism.** This intelligibility of the world-process the Stoics interpreted in terms of a quasi-personal mind, akin to human reason, omnipresent in the universe and governing the course of events. To designate the rational ruling principle of the world they took over from Heraclitus the word "logos" to which, however, he himself, as we have seen, very likely never attached any cosmic or metaphysical significance. And then, apparently, they read back into him their own use of the term, and attributed to him the concept of a Logos or cosmic Mind immanent in the ever-living Fire.

In any case, the Stoics erected upon Heraclitean foundations an elaborate pantheism. The Logos and the ever-living Fire were amalgamated into a single, living, moving, thinking world-stuff, which they called indifferently God, Ether, Fire, Nature, and the Universe. And the world-process they variously described as the expression of Reason, Mind, Soul, Providence, Destiny, and Fate. All these are really one. Mind is essentially material, fiery breath, and matter is essentially living and thinking and rational in its behavior. All that occurs, although it proceeds by inexorable necessity from the nature of the universe, is also dictated by a cosmic Reason, directed by divine Providence, and determined by a wise purpose, since the nature of the universe is rational, and all that occurs is for the best.

In developing this pantheism, the Stoics appealed to the analogy of the human being, who is both body and soul. Narrowly speaking, God may be called the Soul of the universe, the universe the body of God. But since neither can be conceived or exist without the other, the two are essentially identical. God is the universe, and the universe is God.

#### IV. STOICISM AND RELIGION

**Piety of the Stoic Attitude.** Of the essentially ethical and religious character of the Stoic pantheism there can be no doubt. The belief in the rationality of the world, the faith that the march of events is providential in character and that all things happen for the best, the serene acceptance of all that occurs as in accordance with the divine Reason,

and the feeling that virtue and happiness lie in identifying the "ruling principle" within us with the "ruling principle" of the world—all these bespeak a profound piety and were a source of moral strength and consolation. Moreover, though the Stoics could not accept contemporary orthodox theology literally, their attitude towards it was not antagonistic, as was that of the Skeptics and the Epicureans. On the contrary, they recognized its poetic and symbolic value, and used the names and stories of its gods to designate different aspects and processes of the universe. Thus they identified Zeus with the universe as a whole, Poseidon with water, Demeter with the earth, Athena with the upper air, Ares with rashness, Aphrodite with love, Apollo with the sun, Artemis with the moon, etc. This symbology was developed to great and fantastic lengths.

Furthermore, they were ready to admit, following Plato and Aristotle, that the stars have souls superior to ours, possessed of a greater share of the divine Reason. Nor had they any fault to find with the cult of heroes, whom they regarded as outstanding manifestations of the divine nature. It is an open question, too, whether they did not also believe in spirits or "demons" intermediate between the spirits of the stars and human souls. At the same time they had no use for the temples, the ceremonies, or the propitiations and prayers of the established cult. Prayer could be only meditation upon the nature of the universe, or, at the most, the expression of the desire to attain virtue; and true worship lay in leading a life of reason in conformity with the rational constitution of the world.

**The Immortality of the Soul.** With regard to the immortality of the soul there were divergent opinions. Zeno seems to have left the question open, but to have leant towards the opinion that the souls of the virtuous, at any rate, survived death. Cleanthes extended survival to all men, but Chrysippus went Zeno one better and limited immortality to the Stoic sage alone. But all the Stoics agreed, at least down to Roman times, that eventually all souls, along with all the rest of the universe, would be reabsorbed into the ever-living Fire, in a world-conflagration. To this point we shall refer again in a moment.

#### V. THE PROBLEM OF EVIL

**Stoic Insistence upon Perfection.** Upon the unity and perfection of the universe in every respect the Stoics could not insist too strongly. Its parts play into one another's hands, and combine to realize the supreme end of providential activity, which is the production and

support of rational beings like man and the lower gods. The universe exists for their sake, not only to be useful to them in every possible way, but also to delight them with its beauty—a quality upon which the Stoics laid great stress in arguing that this is the best of all possible worlds. Finally man was created to glorify God and enjoy him forever.

Conversely, this design expresses itself as a providence that not even the fall of a sparrow can escape. Nothing, Cleanthes says, can occur on earth, or in the heaven above, or in the sea, apart from God. Nothing, Chrysippus repeats, not even the least event, can happen except in accordance with the divine Reason and with law and justice and providence.

**Perfection and Evil.** However, the Stoics found it difficult to reconcile the perfection, the rationality, the beauty, and the providential direction of the universe in every respect with the seeming failure of its design along so many lines, and with the irrational, imperfect, ugly and evil character of so many of its aspects and workings. In short, they had on their hands the problem of evil in its acutest possible form. To solve it, they marshaled almost all the arguments that have ever before or since been employed by those who, believing in a God at the same time all-powerful and all good, have found themselves hard put to justify his ways to man.

Their main line of defense was that the seeming imperfection of the parts of the universe is in reality necessary and even advantageous to the perfection of the whole. In supporting this assertion the Stoics could ignore the occurrence of so-called physical evils like pain, disease, death, and natural catastrophes. Since none of these could shake our "apathy" unless we allowed them to do so, they were not evil in themselves but simply events as "natural" as any others. Nay, more, they might be advantageous in keeping the population down or as means for punishing or setting an example to the wicked, to whom alone they would be annoying. Even the bedbug, Chrysippus remarks, has its place in the moral economy. It serves to keep us from sleeping too late or too much.

**The Interdependence of Opposites.** Again, the Stoics fell back upon the Heraclitean doctrine of the interdependence of opposites. No day without night, no summer without winter, therefore no justice without injustice, no courage without cowardice, no truth without falsehood. Evil is the necessary foil to good.

To this argument they also gave an esthetic twist. Just as the comedy is improved by coarse wit, or the lights in the picture are enhanced

by the shadows, so what we call imperfection is an integral part of the perfection of the all, for the absence of which the universe would be poorer. In these matters we must trust God, for he, as Cleanthes sings in his *Hymn to Zeus*, understands how to make the crooked straight, to bring order out of disorder, to make the unlovely lovely in his sight, and so to harmonize good and evil that they form a single rational whole.

Moral evil, however, could not be dealt with in this manner. The esthetic analogy might indeed be invoked again, and the sinner might be likened to the villain in the play, without whom the dramatic effect would be spoiled. But the fact remained that God was the playwright, and, in creating or permitting sin, he had apparently made himself responsible for something whose positively anti-moral and anti-perfect character could not be denied. For here was something that affected the essence of man himself, that sapped his reason and perverted his inner attitude. Furthermore, there was the disproportion between merit and reward to be reckoned with. The wicked flourished, the virtuous were cast down. Natural catastrophes, in curtailing population, failed to distinguish between the sheep and the goats.

**Misfortune and Virtue.** Upon the disproportion of reward to merit the Stoics first trained their old argument that no *real* misfortune can overtake the good man, and that conversely no *real* good fortune can happen to the vicious one. For that matter, misfortune may be an occasion for the display of virtue. Later, too, we find Seneca bringing forward a curious anticipation in inverted form of the Christian doctrine of original sin. The prosperity of the wicked, he suggests, may be explained as a sort of imputation to them of the merits, if not of their first parents, at least of some godly ancestors.

But the fact of sin could not be demolished by such means and to reduce it the Stoics finally advanced the argument from free-will. Virtue and vice are attitudes of the will which are not forced upon us from the outside. The adoption of them springs only from ourselves, and it is within our power to choose which one we will adopt. For this choice the individual alone, not God, is responsible. Hence God is not responsible for moral evil, which is the only evil.

**Free-Will and Divine Foreordination.** Such an explanation, however, was not consistent with their deterministic view that everything that happens, including our own actions, is providentially governed and directed for the best. Hence we find both Cleanthes and Chrysippus trying to reconcile human free-will with divine foreordination. This they attempted in a number of ways.

In the first place, Cleanthes suggested that foreordination, although it excludes chance, does not exclude the possibility either of our having acted differently in the past, or of acting in the future in any one of a number of ways, possible at the moment, which will always remain open to us. Chrysippus, however, though he agreed with Cleanthes as to the possibility of "might have beens," felt that future courses of action now possible and open to us may become impossible as time goes on. But both men saw in this idea of possibility a basis for free-will within a deterministic scheme.

**Proximate and Principal Causes.** Again, we find Chrysippus trying to reconcile moral responsibility with destiny by maintaining that destiny implies law, and law implies a distinction between right and wrong and meritorious and censurable behavior; and again, that destiny implies a universe, a universe a God, and a God goodness, which in its turn implies the distinction between good and evil. To the objection that if all things are fated, it can make no difference what we do, he retorted that events are predetermined not absolutely but contingently. Certain acts are bound to have certain results, but we are not bound to perform them. Furthermore, he distinguished between so-called "proximate" and "principal" causes of moral action, and regarded the one as determined, the other as free. A cylinder, for example, needs a push to set it rolling, but, once started, its course is guided by the inner necessity—or freedom—of its own nature. In the same way the will cannot act without the proximate cause of a motive, but assent to that motive, which is the "principal cause" of the act, lies with the will itself. Therefore this assent is undetermined by anything outside ourselves.

**Limitations of God.** Cleanthes, moreover, from the very beginning had had his doubt about the feasibility of identifying destiny and providence, and had tended to oppose "necessity" to the divine purpose, as an outer limitation upon the divine power responsible ultimately for evil. And Chrysippus was forced by the frequent failures of oracles and soothsayers to conclude that God cannot know everything, and to concede, under fire, that neither can God do everything but is confronted with necessities that even he cannot overcome.

Moreover, you cannot expect both to have your cake and eat it. For example, according to Chrysippus, if the human head is to conform to the best design it has to be built of easily broken bone. A fragile skull is a "necessary consequence" or disadvantage of a shapely one.

Later, at any rate, the doctrine of special providence, also, was un-

determined by the admission that though God controls events in the large he leaves minor matters to take care of themselves. By the time of Cicero and Seneca this incipient dualism was well on its way to develop into a doctrine of intractable matter, and God was cleared of responsibility for evil on the ground that he was doing the best that he could under difficult conditions, and must not be blamed for his inability to do better.

#### VI. STOIC COSMOLOGY, PHYSICS, AND ASTRONOMY

**Cosmology.** The main outlines of the Stoic cosmology were laid down by the Stoic version of the Heraclitean philosophy. Conceiving as they did the intelligible structure—or Logos—of the universe as an active, creative world-reason—or *logos spermatikos*—they regarded the world-process as the unfolding of a divine plan. But the Logos does not precede in time the universe in which it expresses itself. For it itself is not in time, but is the Form or Nature of all that takes place in the temporal process. Furthermore, it is an organization of all the myriad forms and laws that give natures and names to individual objects and inspire and govern their activities. These forms and laws are particular *logoi spermatikoi*, individual manifestations of the creative and all-ruling *logos spermatikos* of the universe.

The fundamental expression of the Logos is the Heraclitean law of the Upward and the Downward Way which the divine Fire follows in its cycle of successive transformations. The tension set up by the opposing ways gives stability to the material structure of the universe. Eventually, however, the Upward Way will prevail and give rise to a world-conflagration in which, as we have seen, all souls as well as all bodies will be destroyed. And then the world-process will begin all over again and repeat itself. This view, however, was rejected by many Stoics, particularly in Roman times, who inclined rather to the Aristotelian teaching that the universe is eternal.

**Physics.** In the development of their physics the Stoics were largely influenced by Aristotle. Like him, and in opposition to Democritus and the Epicureans, they taught that qualitative alteration could not be reduced to terms of movement in space, though they considered locomotion the primary form of change. Time and space are not found apart from body. The one is the extension occupied by a body, the other the "extension" occupied by its movement. Neither one exists in itself or outside the universe. The "empty" is neither spatial nor temporal. It is a kind of existent non-existent.

Motion, as with Aristotle, was divided into two sorts, rectilinear, pertaining to things of earth, and circular, natural to the heavens. Fire and air tend to move towards the circumference, water and earth towards the center of the universe. The Aristotelian fifth element, the super-fire or ether, which Aristotle had adopted as a kind of insurance against a world-conflagration, was rejected as unnecessary. The four causes of Aristotle were also dispensed with, and were reduced to variations of the single fundamental causal act by which the nature of things determines each thing to be what it is, to occur at the time and place it does, and to have the antecedents and the consequences it has.

**Astronomy.** The Stoic astronomy was in the main Aristotelian. Earth, water and air form at the center of the universe an immobile mass, about which, embedded in their respective spheres, the moon, the sun, the planets, and the heaven of fixed stars revolve. Incidentally, the Stoics were violently opposed to the doctrines that the earth turned upon its axis and revolved about the sun—two theories that were beginning to make headway even as early as Cleanthes' time. They denounced these views as impious, and their influence was instrumental in shelving them and in committing the world for so many centuries to the Ptolemaic system.

## VII. THE STOIC PSYCHOLOGY

**The Nature of the Soul.** The Stoics' psychology reflects to a large extent their metaphysics. Man is a microcosm or small edition of the universe, just as the universe is a macrocosm or large edition of man. Like the universe he is both body and soul. His soul is part of the Soul of the world, and like the World-Soul and primal world-stuff is pure fire infused with reason. At the same time, the Stoics admitted that she might have some admixture of air, and even of the other elements—which would account for the four different types of temperament—hot and cold, dry and moist. In addition to these temperaments the soul has various parts or activities—the ruling principle, the five senses, the faculty of speech, and the ability to procreate.

The ruling principle is reason, which is a particular manifestation of the divine mind. It is also, Chrysippus tells us, the principle of personal identity. By it the activities of thought and will are sustained. From it all the other activities of the soul are derived. Its seat is in the heart, and thence its functions extend to the other organs and parts of the body, like the arms of an octopus from the central body.



Even feeling and desire have not separate regions and seats, as with Plato, but belong immediately to it. Through the sense-organs the ruling principle stretches out into the external world.

**Nature of Sensation and of the Body.** This outgoing activity is poured forth through the channels of the sense-organs. From the eye, for example, rays of light are emitted which meet those coming from the visible object. The same is true of hearing. The medium through which the ruling principle reaches out into the sense-organs, and the sense-organs reach out towards their objects, is breath or air.

Reproduction is not merely of the body but of the soul as well. The ruling principle projects itself into the organs of reproduction as it does into those of sense, and the resultant seed is a divine thing. It is a fragment of a sort of soul-plasm, torn, Zeno tells us, from the spirits of our ancestors. Reason, however, is not present in the embryo. It develops in the child after birth. Animals, also, lack it. Their behavior is governed by the impulses of desire and aversion. In man these impulses must be governed by reason. Otherwise they become irrational and harmful.

The body is composed mostly of earth and water. But as these elements are themselves forms assumed by the ever-living fire, so the body is a form of soul. It and the soul grow and develop as one thing. With the physiological details of bodily structure, however, the Stoics concerned themselves little.

#### VIII. THE STOIC EPISTEMOLOGY

**The Nature of Knowledge.** There remained the task of explaining how the ruling principle, stimulated by the external world, not only created sensations, but built out of those sensations, by the process that we call *knowledge*, abstract ideas and concepts that we call *true*. The mind at birth, the Stoics tell us, is like a blank page or an unmarked wax tablet, upon which both external objects and internal states of the body make actual physical impressions. Those impressions are preserved by memory, and thus give rise to lasting images or phantasms. Then, by the comparison, combination, and association of these images, trains of thought are initiated, sometimes spontaneously, sometimes artificially and deliberately, which terminate in general concepts. The spontaneous play of images is the basis of certain notions common to all mankind, such as truth, virtue, good, evil, and the like. But when our thinking is deliberately directed and subjected to the laws of logic, we acquire knowledge.

The Stoics, however, followed the Cynics in maintaining that general ideas have no counterpart in the external world. The existent is concrete and individual, and universals are merely names marking the superficial resemblances of particular things. Indeed, the Stoics went so far as to say that only bodies and their modifications have real existence.

**Truth and Error.** But how can we be sure that we have a true image or concept of things as they really are? What is the test for distinguishing a true idea from a false one? For that matter, how is it possible to entertain false ideas at all? We must, then, find a reliable criterion of truth and error.

Plainly this criterion cannot be found in our sensations, which are neither true nor false, but are simply there, are what they are, and cannot be mistaken for one another. But the case is different with the images built up out of sensations. These we do not have to accept for what they seem to be, as we do sensations. They may be hallucinations, or illusions, or false representations, as when we mistake one thing for another. Error consists in assenting to such images as if they represented external objects, when they do not. Or it may lie in accepting an image as corresponding to one thing, when in reality it corresponds to another. We are not forced to such assent and acceptance. To err or not to err lies within our power. It is an act of the will.

**The Source of Error.** But why does the will make wrong assents and acceptances? The reason for this may lie either in the will itself or in the nature of the images in the mind. The will may suffer from an inherent lack of tension, and therefore be unstable and inclined to be either too irritable and hasty or too flabby in its acceptances. Or a lack of clearness in the image itself may cause even a well-balanced will to accept a misleading image as a reliable one. Generally speaking, however, clear picturing and resolute willing go together, whereas cloudy images appeal to the weak or overhasty will. To clarify the picture and ensure right assent, the image must be carefully studied and thoroughly mastered before it is accepted. Such study may provoke either acceptance, or denial, or simply suspension of judgment.

**The Criterion of Truth.** The criterion of truth, then, is clearness. The clear image carries conviction and compels assent. It is *irresistible*. It feels true. Beyond this irresistible feeling of truth we cannot go. Any image that after prolonged and careful examination and weighing has this value simply has to be accepted as indicating that its counterpart really exists. This test of irresistible conviction was also set up for the "common notions" and for scientific and philosophic concepts.

Those ideas are true descriptions of the universe, which are so clear and make everything so plain that there is no getting away from them.

To bring, however, a scientific or philosophic concept to the point of irresistible clearness requires much more detailed and painstaking study than is necessary in the case of images and "common notions," whose convincing character is largely spontaneous and more immediately self-evident. Such concepts are established only by reasoning them out step by step through a process of logical thinking. In short, a sound logic is a necessary preliminary to sound science and philosophy.

#### IX. THE STOIC LOGIC

The Stoic logical inquiries led them first to investigate grammar, to whose crystallization they helped contribute. They then proceeded to inquire into the nature of propositions and judgments of truth and falsity. They found, however, that categorical affirmations and denials were of no great importance to the process of scientific and philosophical investigations, although the conclusions drawn from such inquiries could always be stated categorically. The process of inquiry itself is conducted rather by a series of hypothetical judgments, which take the form of "If this, then that; but not this, therefore that," and "Either this or that; but this, therefore not that." It is by using hypothetical and disjunctive syllogisms of this sort that we finally reach an "if," and a "therefore" that enable us to say that such and such *must* be the case.

The Stoics studied in considerable detail disjunctive and hypothetical syllogisms, of which, however, Chrysippus accepted only five forms as giving correct conclusions. These studies later exercised considerable influence on medieval logic.

In spite, however, of their efforts to create an ironbound logic and to establish scientific and philosophic thinking upon an infallible basis of absolutely clear, irresistible, and convincing concepts, the Stoics from the beginning began to backslide and to concede that probability, without complete certainty, was a sufficient reason for scientific and metaphysical conclusions. In so doing, they were perhaps influenced by the repeated attacks made by the Skeptics upon the possibility of being absolutely sure about anything, and particularly upon the doctrine of irresistible impressions as a test of truth.

## X. THE MIDDLE STOA

**Diogenes.** By the beginning of the second century B.C. Stoicism was diffused throughout the Hellenistic world, and had even its outposts as far east as Babylon. In Athens meantime, the leadership of the School had devolved upon Diogenes, a native of Seleucia. In 155 B.C. he, along with Critolaus, the head of the Peripatetics, and Carneades, president of the Academy, were chosen by Athens as special ambassadors to Rome to plead for a remission of the fine imposed upon Athens by Roman arbitrators as a penalty for invading and plundering the state of Oropus. While the case was under consideration by the Roman Senate, all three took the opportunity to give public lectures on their respective philosophies.

Diogenes' way had already been prepared for him by the Stoic Crates, head of the great library recently founded by Eumenes II at Pergamus in emulation of the library at Alexandria. Four years earlier Crates had visited Rome and acquainted the intelligentsia with Stoic doctrine. So Diogenes did not have to lecture to a wholly uninstructed audience. He made a good impression, though he was completely overshadowed by the Skeptic, Carneades, a far abler man and more brilliant lecturer. The latter, indeed, created such a furor that Cato besought the Senate to render its decision at its earliest convenience and bid the three ambassadors godspeed before the beliefs of the Roman youth had been completely undermined by Academic agnosticism.

**Panaetius and Posidonius.** But it was Panaetius and Posidonius who brought Stoicism once and for all to Rome. Panaetius, born about 189 B.C. into a rich and prominent family of Rhodes, studied philosophy first at Pergamus, and then at Athens where he became an ardent disciple of the Stoic Diogenes. On a visit to Rome he formed a lasting friendship with Scipio Africanus, and became with him and the historian Polybius the center of a learned and aristocratic circle. In 129 B.C. Scipio died, and Panaetius, elected about the same time to the presidency of the Stoa, returned to Athens, where he spent the remaining twenty years of his life. He possessed great eloquence, and wrote in a forceful and polished literary style. And he had a thorough knowledge of Greek philosophy and was a devotee of Plato.

Posidonius, who was also born at Rhodes, about 135 B.C., was one of Panaetius' most gifted pupils. Although, after much traveling, he finally settled in Rhodes where he died about 51 B.C., he exercised

through his writings an influence scarcely second to that of Panaetius upon the growing circle of noble Roman Stoics. He was one of the most learned men of his age, well versed not only in history and philosophy, but in the natural sciences as well, and he shared Panaetius' admiration of the Platonic teaching.

With them the narrowness and the traces of Cynic uncouthness, from which the Early Stoa had not shaken itself entirely free, disappeared, and the tone of Stoic teaching became more cultured and more catholic, and more attuned to the spiritual ear of the contemporary world. Moreover, at the hands of both men Stoic doctrine underwent further, though not parallel, modifications. Panaetius continued the humanization of Stoic ethics. He adopted Aristotle's definition of virtue as a golden mean, and admitted that external goods might be not only means to right living, but ends to be pursued for their own sake. Furthermore, he helped adapt Stoicism to Roman needs by emphasizing the virtue of temperance, or propriety in daily life, as the most important revelation of the good will, and by laying great stress upon the performance of the daily duties that result from contact with the world.

In his metaphysics he made even wider departures from the earlier teaching. He rejected the theory of a world-conflagration, and maintained with Aristotle, not only the eternity of the world, but the latter's sharp distinction between God and the universe. He was also suspicious of divination.

**Reactionary Tendencies of Posidonius.** From the views of Panaetius, Posidonius was somewhat reactionary. Apparently of a deeply religious temperament himself, he emphasized the religious aspects of Stoic doctrine in an old-fashioned way. His ethics reverted to the severity of Cleanthes. He clung to the reality of divination and to the theory of a world-conflagration, and was greatly shocked by the heliocentric theory. He was a firm believer in the divine origin of the soul, and in her pre-existence as well as her personal survival of death—beliefs that led him at times to contrast the soul to the body in a dualistic fashion. Historically, too, he played an important part in the philosophic ancestry of the second person of the Christian trinity. From him Philo Judaeus, who will presently engage our attention, took over the Stoic Logos, and made it part and parcel of the Neo-Platonic speculation that so influenced the early development of Christian theology.

**Influence of Rome on Stoicism.** The ball that Panaetius and Posidonius thus set rolling proved to be of snow and gathered momentum,

prestige, and numbers as the years passed. Rome was henceforth the home and center of the school, and little more came from Athens. Under Roman influence Stoicism continued more rapidly than heretofore to develop the divergencies of opinion and the concessions to hard fact that had begun to appear so early in its history. It became more mellow, more urbane, more tolerant, more adapted generally to the needs of the mass of mankind. This was due in part to the worldliness and the sturdy political and social common sense of the Romans. In part, too, the change reflected the cosmopolitanism of the Empire, which fused and welded together many different countries and civilizations with all their variety of customs, manners, moralities and gods. This imperial atmosphere, which no Roman of the period could wholly escape, was unfavorable to the development of intellectual and moral dogmatism.

Again both the Academics and Epicureans, as we have already remarked, played no small part in the humanization of the Stoic school. The Academics, who were death on dogmatism of any sort, helped undermine the original Stoic assumption of intellectual certainty. And the Epicureans, their opponents, contributed not a little to the liberalization of the School.

#### XI. ROMAN STOICISM. THE LATE STOA

It is impossible for us to follow in any detail the intricate evolution of Stoicism in this later and third period, or to give all the names of its leaders and prominent adherents. The best we can do is to mention a few of the most eminent Romans who were either professed members of the sect, or sympathetic in the main to its teachings. Of Scipio Africanus we have already spoken. Horace and Virgil were both influenced by the School, and later, too, Hadrian, most fascinating and enigmatic of the Roman Emperors, was interested in it. Again, Cicero was officially an adherent of the old Academy, but found much in the very similar liberal wing of Stoicism to arouse his sympathies. Seneca, though professing independence, was a Stoic at heart. Attalus, who converted him, and Musonius, his contemporary, were evangelists and had a tremendous influence. And finally we have the slave Epictetus, and the philosopher-king Marcus Aurelius. To the translations and comments of Cicero and Seneca we owe most of our knowledge of the older school; to the discourses of the slave and the Emperor our most profound insight into what Stoic teaching might mean to men.

**Seneca.** Seneca illustrates both with his writings and his life the concessions that the Stoics were forced to make to the exigencies of hard fact, the worldliness of the Roman genius, and the spirit of the times. Austere and somewhat sanctimonious by nature, he was given to deploring human weaknesses and to bewailing the vanity and wickedness of the world, from which he professed himself to await impatiently release in a happier home beyond the grave. But at the same time he was far from averse to worldly success. He was a shrewd and energetic business man, who considerably increased the fortune he had inherited. And in his philosophic sermons he defended the righteousness of great wealth against the doubts cast upon it by the Cynics and the Epicureans. He succeeded also in rising to great political prominence and was tutor and later minister to Nero—whom, however, he so bored and irritated in the long run that he was eventually ordered by the Emperor to commit suicide.

Again, his feeling that reason is bankrupt and his willingness to accept in its place sentimental and moral needs as sufficient grounds for religious convictions bear witness to the changes Stoicism was undergoing in its final phase. Taken in connection with his general inclination to be skeptical of all certainty, his inclination to temporize, and his teaching that social and political hazards should be avoided rather than faced, they show how rapidly and to what lengths Stoicism was now departing from the doctrines of its founders.

**Popularity and Persecution of Stoicism.** By the time of Augustus Caesar, Stoicism had begun to seep from the upper classes to the masses, and under Tiberius it had obtained a considerable following among the people at large. Its growing popularity was perhaps due in part to its willingness, which we have already remarked, to accept the popular theology as an allegorical and pictorial expression of Stoic truth. This hospitable and sympathetic attitude was all the more marked by its contrast to the attacks launched by the Academics and the Epicureans upon the current orthodoxy. In Rome the work of reconciliation was carried on partly by Cicero, whose views were eclectic, and who translated and adapted in part the writings of Panaetius and Posidonius, and partly by Cornutus, who lived in the first century A.D. Although he contributed little to Stoic thought, he wrote a book in which every last detail of Graeco-Roman theology was given a Stoic meaning.

In the first century A.D., however, after the Republic had given way to the Empire, philosophy, and particularly Stoicism, fell for a time under a cloud. The leading philosophers, most of whom at the mo-

ment happened to be Stoics, were regarded by the Imperial government as menaces to Roman ideals and institutions, and were subjected to frequent persecution and deportation. Under Nero, indeed, a determined effort was made to suppress all freedom of thought and expression, and Stoicism, since it was the most prominent champion of free inquiry and discussion, bore the brunt of the attack. Many of its leaders were put to death, and many others deported. The growing sect of Christians was now also for the first time persecuted. Similar though less drastic attempts at suppression were made by Vespasian and Domitian. For a while, then, Stoicism had to take to cover, hold its tongue, and bide its time. But that time was not long in coming. Twenty years later, we find the Emperor Hadrian establishing public teachers of philosophy at Rome, and his successor, Antoninus Pius, extending the system to the provinces. And Hadrian's grandson by adoption was the Stoic Emperor, Marcus Aurelius Antoninus.

**Epictetus.** Before turning, however, to the Emperor let us consider for a moment the slave, the scarcely less distinguished Epictetus. Slavery, it must be remembered, did not in Roman times necessarily imply inferiority of intellect or even of birth. It was confined to the population of the conquered races, and was often only an accident of nationality or war. Hence, in the great Roman households the slaves were frequently better educated, more talented, and more civilized than their masters, and were entrusted with highly responsible and confidential positions. They ran their masters' establishments, advised them on all matters, educated the children, and in all but name were trusted companions and friends rather than servants. Men of such caliber were generally given their freedom as a reward for their loyalty and efficiency, and sometimes rose afterwards to positions of high political importance. The ministers of the Emperor Claudius, for instance, were almost all of them freedmen.

Epictetus, himself, was a Phrygian. Born about 50 A.D., he started life as a slave to a freedman formerly belonging to Nero, and was sent by him to attend the lectures of Musonius. He proved an apt pupil and quickly won recognition and reputation among contemporary Stoics. Indeed, before he was forty he had become important enough to be deported by Domitian along with the other prominent philosophers of the time. He retired to Nicopolis, where he continued to lecture till his death in 130. Tradition has it that he and the Emperor Hadrian were friends.

**A Moralist.** The sayings of Epictetus, taken down by Arrian, and transmitted to us in two books, the *Discourses* and the *Manual*, rank



with the *Meditations* of Marcus Aurelius among the great books of consolation. Philosophically, they reveal Epictetus as an old-fashioned Stoic in many respects, leaning towards Cynic austerity and concerned principally with the moral and religious aspects of the school's teaching. He concerned himself little with physical and metaphysical speculations, or with logic, all of which he regarded in true Cynic fashion as a waste of time. As he grew older, to be sure, he became reconciled to the necessity of some logic as indispensable to sound thinking, but his tendency was always to refute his opponents by simple appeals to what he considered the self-evident truth of his positions. For him the philosopher was primarily the healer of souls, whose message was more to the moral sense than to the intellect, and whose vocation was to arouse the conscience, to awaken a conviction of sin, to turn men from their wickedness and to point the way that led to happiness and peace.

The content of his message added little new to Stoic doctrine. Salvation was of the familiar sort. Its root and flower lay in the time-honored cultivation of independence on external circumstance. It was also stimulated and enriched by religious sentiment and conviction, and by an assurance that all is for the best.

**The Brotherhood of Man.** We have, however, no definite indications of his views on immortality. Certain passages suggest a dualistic opposition of the soul to the flesh, from the burden of which she is released by death. Others seem to substitute for personal survival the breaking up of the individual into the elements of which he is made, and a possible recombination in some new object of the particles that once composed him.

What does stand out in Epictetus, as also in Marcus Aurelius, is the doctrine of the brotherhood of man. The Cynics, we may remember, had proposed it in a rough and negative form, incidentally to their general denunciation of all political institutions, including national units, as artificial and contrary to nature. The Stoics fell heir to it, gave it positive content and meaning, and turned its purely destructive anti-nationalism into a constructive and civilized internationalism. All men, Epictetus tells us, are children of one Father. All men, irrespective of race or station, are brothers. All men equally are not only citizens of the world but of the universe, akin not only to one another but to all things. The Stoic will feel this kinship with them all, and particularly with his fellow men. He will love them like brothers, whatever their nationality, their race, or their station in life may be. The Christians, also, were by now developing the

same doctrine in their own terms. Thanks to Stoicism, they found the way already prepared for it, increased in numbers and influence, and moved towards their eventual domination of the western world.

**Marcus Aurelius.** According to the historian Gibbon, the condition of the human race has never been more prosperous or more happy than it was at Rome for the greater part of the century following the assassination of the Emperor Domitian in 96 A.D. A series of rulers succeeded him, as excellent as he had been ignoble, culminating in the two Antonines in whom Plato might have felt that his dream of the philosopher-king was at last brought true. Born in 121 of an old Spanish family long eminent at Rome, Marcus Aurelius was adopted while still a youth, at Hadrian's behest, by his aunt's husband, Titus Annius Antoninus, whom the childless Emperor, now an old man, had lately designated as heir to the throne. Thus from an early age he was hedged by the divinity that would some day be his, and was educated with great care, and at the same time with extreme simplicity of life, for his future position. Philosophy was taught him by Junius Rusticus, at the time one of the most eminent Stoics in Rome and a follower of the teachings of Musonius and Epictetus. How great an influence his master's precepts and example had upon him he tells us in the *Meditations*.

Grave, studious, conscientious, physically never robust, disliking pomp and ceremony, he viewed his approaching responsibility with distaste rather than elation, and his rapid elevation to a quaestorship at seventeen, and, the next year, to a consulship and the title of Caesar, which carried with it a close association with Antoninus, now Emperor, failed to turn his head or to affect his native modesty and kindliness. At the same time, he was scrupulous in maintaining the dignity of his position and the outward show and state that it demanded.

A deep affection sprang up between him and his uncle and adopted father, strengthened by his marriage with Antoninus' daughter Faustina. To her and to the thirteen children she bore him he was devoted, and her death and the loss of eight of them in childhood and in youth, were a never-forgotten grief to him. He shared, too, the Emperor's love of the country and of country life, and of retiring to the villas at Lorium and at Lavinium in the Alban Hills where he could go boar-hunting to his heart's content.

**Interest in Philosophy.** In one respect, however, his family circle failed to satisfy him. It could not give him the intellectual companionship that his native intelligence and imagination, and his interest in

literature and philosophy, and particularly in Stoicism, craved. The Emperor and Empress were not people of intellectual tastes, and Faustina, however devoted a wife and mother she may have been, malicious gossip to the contrary notwithstanding, was certainly not overburdened with brains. This aspiration for wider horizons than those disclosed by a happy home life, or at a purely moral elevation, led to his friendship with Fronto, the leading spirit of a brilliant literary circle which numbered among its members Lucian, Polemon, Favorinus, and Aulus Gellius, and devoted itself especially to the study of the Latin classicists of the Republic. A man of the world, one of the most eminent lawyers of his time, and none too glad a sufferer of philosophers, it may well be that Fronto did much to infuse the Stoicism of his imperial friend and pupil with the breadth and humanity of vision that characterize it.

**Reign as Emperor.** In 161 Antoninus Pius had died and Marcus had come to the throne. The remaining nineteen years of his life called for all his Stoicism. Death and disappointment within his family, the plague that swept over the Empire and devastated Rome, the war with the Parthians, the ceaseless efforts to beat back the ever more menacing barbarian invasions from the north, the revolt of a trusted general in command of the armies of the East—all these laid upon him one by one a burden heavier than his none too robust constitution could bear. Almost all his reign was spent at the front, and it was at headquarters in the field near present day Vienna and Budapest, by candle-light in his tent, after long days of attending to all the civil and military business of the Empire, that the *Meditations* were written. Here, too, near Vienna he died in 180 A.D.

**Faith in the Universe.** Philosophically, Marcus Aurelius belongs among those who were inclined to substitute the notion of probable truth for the certainty and infallibility of Stoic teaching to which some members of the school still clung. But he has no doubt that the world-order is rational, and that all things and events are expressions of a divine Reason which finds them all equally necessary and equally perfect. Nor is there any uncertainty either in Aurelius' words or deeds that living in the light of reason, both human and divine, means to be firm and unyielding, to be patient, to be magnanimous, to be compassionate and forgiving, in the face of all that destiny may decree.

Death, he feels, more surely than Epictetus, is the end of the individual. It merges us with the elements from which we spring, and re-unites the reason within us with the Logos of which it is a part. It is as natural as birth and growth, as begetting and bearing, as ma-

turity and old age. It is not to be desired or dreaded, hastened or delayed. It is simply to be accepted along with all other natural facts and awaited with the same calmness that we await each new year of life. One thing is certain—no one has anything to fear from it.

**Decay of Stoicism.** At the death of Marcus Aurelius, Stoicism retired to the background of the philosophic stage, there to remain until its final extinction. It still had a large following, but it suffered from the competition of Christianity, which was now rapidly pushing to the fore, and was not only attracting to its ranks many who would otherwise have become Stoics, but also was recruiting its converts from within the School. But Christianity itself was in its early days merely one phase of a larger philosophic and religious movement, which will presently be reviewed. Since, however, this movement had important negative as well as positive causes, and was in part a reaction against a widespread, rapidly increasing and philosophically organized spirit of agnosticism, it will be well first to consider for a moment the skeptical attacks, with which, as we have seen, Epicureanism and Stoicism also had to contend.

The following quotation, jotted down in camp at Carnuntum on the Danube near Vienna (II, 17), is typical of the lonely heights from which he viewed all time and existence:

Of human life the time is a point, and the substance is in a flux, and the perception dull, and the composition of the whole body subject to putrefaction, and the soul a whirl, and fortune hard to divine, and fame a thing devoid of judgment. And, to say all in a word, everything which belongs to the soul is a dream and vapor, and life is a warfare and a stranger's sojourn, and after-fame is oblivion. What then is that which is able to conduct a man? One thing, and only one, philosophy. But this consists in keeping the daemon within a man free from violence and unharmed, superior to pains and pleasures, doing nothing without a purpose, nor yet falsely and with hypocrisy, not feeling the need of another man's doing or not doing anything; and besides, accepting all that happens, and all that is allotted, as coming from thence, wherever it is, from whence he himself came; and, finally waiting for death with a cheerful mind, as being nothing else than a dissolution of the elements of which every living being is compounded. But if there is no harm to the elements themselves in each continually changing into another, why should a man have any apprehension about the change and dissolution of all the elements? For it is according to nature, and nothing is evil which is according to nature.

## Chapter XVIII

# THE SKEPTICS

### I. PYRRHO

**Attack on the Possibility of Knowledge.** The Platonic Academy, we may remember, had quickly succumbed to the moralizing temper of the times, and had abandoned metaphysical for ethical problems and discussions. This interlude of indifference to metaphysical speculations soon turned to positive dislike of them, and was succeeded by an active distrust of the mind's ability to know the nature of Reality. Before, however, this suspicion became articulate in the skepticism of the Academy under Arcesilaus, an independent onslaught upon the possibility of knowledge and the pretensions of metaphysics had been made by Pyrrho of Elis, born probably about 360 B.C. He is said to have accompanied the army of Alexander to India, and to have passed the last years of his life, poor but respected, in his native city. His skeptical attitude seems to have been derived in part from his acquaintance with the logical mazes in which the Megaric school delighted, and in part from the doctrine, accepted alike by Sophists, Cynics, Cyrenaics, Plato, and Democritus, that sense-experience is untrustworthy. But, whereas both Plato and Democritus believed that reason was able to see through the false reports of perception and to grasp the nature of the Real, Pyrrho extended their disbelief in the senses to thinking as well, and came to the conclusion, at which Protagoras and the skeptical followers of Socrates had arrived, that knowledge of anything absolute is unobtainable. The Sophists, it will be remembered, had gone so far as to deny categorically that there is any such thing as universal and absolute truth. Pyrrho, however, did not proceed to quite such lengths. He contented himself with pointing out that such truth, if it exists, cannot be known by the human mind.

**The Relativity of Truth and Morality.** As Pyrrho left no writings,<sup>1</sup> all our knowledge of him is secondhand and scanty at that. But he

<sup>1</sup> Almost all the original writings of the Skeptics, with the exception of those of Sextus Empiricus, have been lost. Fragments of Timon survive and have been

appears to have argued that individuals differ quite as hopelessly in what they think as in what they perceive. Philosophers disagree, each claiming that reason is on his side, and, as a matter of fact, bring forward equally convincing arguments for the most diametrically opposed conclusions. Every statement, then, about the nature of Reality may be countered with a contradictory statement no less well-founded. Even so-called moral verities, or in other words, universal and authoritative standards of human practice, turn out upon examination to be matters of tradition and convention, relative to time and place. The approved characters, institutions, and ways of one age and group are not those of another. No amount of thinking can decide between them and lay down which are best.

It follows that the only sound attitude in all questions is one of complete suspension of judgment. In pretending to know what is or is not really true or right, we are only expressing our private opinions of what seems true or false to you or me. At the same time, Pyrrho and his pupil Timon tried to avoid the objection, already made by Plato to Protagoras, that they were asserting as absolutely certain the non-existence of absolute certainty. They dodged the difficulty by maintaining that even their own position was not certain, but only probable. The most he can say, Pyrrho feels, is that in his opinion the probabilities are against the possibility of attaining certain knowledge and of arriving at indubitably certain conclusions on any subject.

**Action Governed by Probability.** Suspension of judgment, however, does not mean indecision in action. You must take chances, and the best bet is to play the numbers that most often turn up—in other words to follow the customs and traditions and to conform to the institutions that have succeeded in establishing themselves. But in so doing you will preserve your mental integrity by remembering that they are in no way God-given or authoritative. They may be right. They probably are. But you will not be fooled by that probability into mistaking it for certainty.

**Timon.** Pyrrho's outburst was in a way isolated. He had one pupil, Timon, and whether or not Timon left any disciples is a matter of dispute. In any case, the school, if such it can be called, did not last beyond the third generation. Already in Timon's day, and to his great disgust, the skeptically minded were flocking to the new Acad-

collected and published by Mullach, *Fragmenta Philosophorum Graecorum*. Otherwise, our chief sources of knowledge of the school are Diogenes Laertius, Cicero, Eusebius, and also Sextus Empiricus. Specific references to these sources have not been given, except in case of quotation.

emy, where Arcesilaus was conducting a detailed and skillfully planned campaign against both the Stoic and the Epicurean epistemologies and metaphysics.

## II. ARCESILAUS

Arcesilaus, born at Pitane in Aeolia about 315 B.C., was some twenty years younger than Zeno and Epicurus. Brilliant, acute, critical, and witty by nature, he received an excellent education in mathematics, literature and philosophy, and at an early age identified himself with the Academy, of which he became the head after the death of Crates. A man of kindly, genial, and upright character, he was highly respected at Athens, even by those whom he attacked most bitterly.

It was the Stoic doctrine of "irresistible impressions" as the test of truth that aroused his philosophic ire, and against them and the trust in the senses they implied he launched all the time-honored arguments against the credibility of sense-perception. More particularly he urged against the Stoics that the false is often as convincing as the true, opinion as irresistible as so-called knowledge, and that therefore irresistible impressions are common property of the sage and the fool alike, hovering between knowledge and opinion, and devoid in themselves of any indication of truth or error. And, since all so-called knowledge is derived from impressions, it can set up no criterion as to which are trustworthy and which are not.

Probability, and here again Arcesilaus agrees with Pyrrho, is all we need as a warrant and a guide for action. As a matter of fact, we are always coming to decisions and putting our decisions into effect without waiting for irresistible convictions, and we are quite right in doing so. Common-sense behavior does not require certainty of knowledge. Morality does not need absolute standards. What is *probably* right is all we know and all we need to know. And, if the somewhat scanty account of Arcesilaus' ethics can be trusted, what is probably the right course to follow is the moderate, temperate, sensible middle path, neither over-lax nor over-severe.

## III. THE NEW ACADEMY

**Carneades.** For some seventy-five years after the death of Arcesilaus, the Academy produced no noteworthy philosophers. Then suddenly Carneades appeared upon the scene. Born about 213 B.C. in Cyrene, he studied at Athens under Diogenes and Chrysippus, as well as under Hegesinus, the head of the Academy. But his Stoic teachers served

only to antagonize him and to turn him into an ardent critic and opponent of their school. His abilities were such as to make him the rallying point of the contemporary skeptical movement, into which he infused so much fresh life that he was regarded by the ancients as the founder of a new Academy. We have already noted that he was one of the three philosopher-ambassadors despatched on a political mission by the Athenians to Rome, where Cato was so exercised over the corrupting influence of his immensely popular lectures upon the beliefs of Roman youth. He lived, himself, to a ripe old age, and died in 129 B.C.

Like Arcesilaus and Pyrrho he wrote little, and his views are known to us thanks to the labors of his disciple Cleitomachus, a Carthaginian by birth, who, it is said, devoted some four hundred books to his master's views, and thus perpetuated his memory.

**Attack on Stoic Epistemology.** Carneades added little if anything new to the critical method of his predecessors. He simply amplified their technique and extended Arcesilaus' criticism of the Stoic theory of "irresistible impressions" into a general attack upon the whole Stoic philosophy. To the Skeptic treatment of probability, however, he made important additions, as we shall see in a moment.

In his further development of the polemic against the Stoic theory of knowledge, Carneades pointed out the deceptiveness of all conviction, however firm. Dreams, illusions, and hallucinations are just as convincing at the time they are experienced as are the impressions of waking and sane perception, and the latter, however clear and irresistible, frequently misrepresents its objects, or, at the best, presents us with a series of contradictory impressions, all equally convincing and all equally relative. The same is the case with seemingly clear and convincing concepts. Many of them involve logical fallacies, and in any case logical correctness is no guarantee that a concept represents the real nature of things. Equally logical conclusions may contradict one another, and there is no way of deciding which of two equally irresistible and convincing ideas is true. Since, then, the supposed certainties of reasoning are as fallacious as those of sense and feeling, there can be no such thing as knowledge of the truth.

**Attack on Stoic Theology.** This conclusion, Carneades illustrated at length by exposing what he considered the absurdities of the Stoic system. Stoic theology offered the broadest target for attack, and bit by bit he set to work to demolish it. First, he discredited its arguments for the existence of God. The universality of the belief in a God, to which the Stoics appealed, he denied outright. Nor had he much



difficulty in disposing of the so-called evidence from divination, omens, and prophecy. He insisted that the universe shows no signs of being intelligently planned and directed, and that it is the height of folly to regard it as designed expressly for the benefit of man when we consider the disasters and destruction it deals out to the human race. Again, in the face of all the misery, the folly, and the sin in the world, not to speak of the undeserved sufferings of the virtuous and prosperity of the wicked, where is there any ground for inferring the existence of a divine providence and a moral government of the universe?

Furthermore, even if the universe could be called rational and good in every respect, we should have no right to conclude that therefore it was the work or the expression of an intelligent and beneficent God. Its law and order and its subservience to human interests might just as well have been produced by natural causes. Nor have we any right to impose upon nature our views of what is higher and lower, and to argue that the rational is *better* than the irrational, or that the human mind must be derived from a universal reason because a thing cannot rise *higher* than its source. Granting that a higher and a lower exist in nature, how do we know what is higher and what is lower in her sight? Her standards may differ from ours.

Moreover, the Stoics make contradictory demands in their very idea of God. They proclaim him to be infinite, but at the same time they insist on investing him with characteristics, like life, consciousness, intelligence, and moral qualities, that imply limitations of one sort or another and make sense only in connection with finite beings. For that matter, the Stoic God cannot be conceived as either infinite *or* finite, immaterial *or* material, not to speak of trying to conceive him as both. The infinite cannot be a whole, and have any organization to support activity and soul. The finite cannot be a totality of existence. The immaterial has no stuff to it to be living and feeling and active. The material is only animate when it is composite. Life and thought are never found in connection with the simple elements which alone are stable and unchanging. But the composite is always subject to change and destruction. Quite apart, then, from the lack of any evidence for the existence of God, the Stoic concept of God is in itself nonsensical.

**Attack on Stoic Ethics.** The Stoic ethics Carneades attacked as vigorously as he did the Stoic theology. In his opinion it contradicted itself in one and the same breath by declaring both that virtue is a final good and end in itself and that it is a means towards living in conform-

ity with nature, which thus turns out to be the real good which virtue subserves.

Again, Carneades continues, it can be argued that all morality is artificial, not natural; that the fundamental motive of human conduct is the self-interest of the individual; that all law is a device deliberately invented for the purpose of assuring the individual protection and security in the pursuit of his ends; and that therefore justice and righteousness are not valuable in themselves but are practiced always with an eye to the main chance. It can be maintained that laws and moral standards are relative to time and place, and that nations have grown great by preferring might to so-called right. We may, then, logically conclude that moral codes should never be allowed to stand in the way of self-interest when they can be safely circumvented—especially since we can never be sure that a moral precept or law really is just and good.

Our final conclusion must, then, be that clear, irresistible and convincing moral standards are as impossible of attainment as irresistible impressions and concepts in the field of knowledge, and that it is as impossible to assert absolute good as it is absolute truth.

**Doctrine of Probability.** So far, Carneades is purely critical and destructive. Now we turn back to his constructive development of the doctrine of probability. Maintaining, like Pyrrho and Arcesilaus, that the necessity of suspending our judgment as to what, if anything, is really true and really good does not incapacitate us for action, he proceeds to analyze at some length the reasons why this is so. After all, he points out, in spite of the absence of any reliable intellectual criterion for distinguishing true from false ideas, the fact remains that some ideas *seem* truer and more convincing than others, and that we habitually act upon them. It is, then, possible to set up standards for distinguishing different degrees of apparent truth, or, in other words, a scale for measuring probabilities.

The degrees of probability are three, and are distinguished as follows:

1. In the first place, we have *mere probability*, where we act with little or no observation of similar situations to help us, and where the chances therefore are about fifty-fifty, but seem worth taking in view of what we shall gain if we win.
2. Secondly, we have *undisputed probability*, where empirical observation shows us that other people have repeatedly taken the same chances successfully and to their advantage, and have never lost. Here the face-value of the probable truth and reliability of an impression is backed up by all the other impressions and notions related to it.

3. Finally, we may be able to act upon chances that not only look worth taking on a fifty-fifty basis and are uncontradicted and backed up by the experiences of other people, but have been thoroughly investigated and found to have solid reasons for taking them. In other words, we may be able to discover a "system" for life's gamble that mathematically, so to speak, ought to work. Then, says Carneades, we have a basis for action that is *probable, undisputed, and tested*.

According as the stakes for which we are playing are low or high, we take more or less chances in the game of life, and play it with an eye to greater or lesser degrees of probable success. We can afford to take greater risks in things of lesser importance, but the serious business of living should always be based upon the highest degree of probability where the chances of failure are least.

**The Basis of Morality.** Now, the most important activities of human life are comprised in what we call moral conduct. Moral behavior, then, should be based upon the highest degree of probability it is possible to ascertain, and to this end ethics must be thoroughly investigated and the most probable human good must be determined. Unfortunately, however, Carneades gives us no clear indications as to his conclusions on this point. Judging from his attitude towards Stoic ethics, he must have felt, like Aristotle, that virtuous living is not the good and is rewarded not by itself but by the happiness which it bestows. Happiness, he seems to have taught, is most probably to be found in the enjoyment of natural goods, among which he included the exercise of mental as well as physical functions and activities. In that case, he was in substantial agreement with the ethical teaching of Aristotle, the Academy, and the left wing of Stoicism, which was already much influenced by the Skeptics.

The doctrine of probability he also applied to theology. He believed, to be sure, that the existence of the gods could not be proved, and that the Stoic idea of God was quite absurd. But he was willing to allow that the existence of the divine was possible and even probable, and that religious belief had a fair chance of being well-founded.

#### IV. PHILO OF LARISSA AND ANTIOCHUS

Carneades was succeeded, as head of the Academy, by his pupil Cleitomachus, and Cleitomachus by Philo of Larissa (b. 148-140 B.C., d. 85-77 B.C.). Under the latter's presidency, one of his pupils, Antiochus of Ascalon (b. 127-124 B.C., d. 69 B.C.), made a vigorous attack on Carneades' doctrine of probability, which divided the Academy into

two camps. The gist of his objection was that Carneades had involved himself in the self-contradiction of talking about apparently, or even probably, true and false impressions, while at the same time denying that any criterion of distinguishing truth from falsehood could be found. How, then, could Carneades distinguish greater from lesser degrees of probability without admitting the existence of an absolute standard by approximation to which the greater and the lesser were measured? How could he distinguish what was probably more or less true from what was probably more or less false, unless he used absolute truth as a yardstick? How could he say that one course of action was probably better than another, without some previous concept of what was really good?

This objection Philo tried to counter by conceding that there is such a thing as absolute truth, while maintaining that certain knowledge of it is impossible. To this Antiochus retorted by inquiring how, if we cannot know the truth, we can know that it exists or know that it is unknowable.

This quarrel embittered the last days of the Academy, which at Philo's death came to an end. The torch of Skepticism now passed across the sea into other hands.

#### V. AENESIDEMUS

The Skeptical point of view had already found favor and devoted adherents in Alexandria, which under the patronage of the Ptolemies, had rapidly become a brilliant center of philosophy, and particularly of science. Here the flame of Skepticism was rekindled to burn with an even greater brilliance in its next great disciple, Aenesidemus.

The exact period of Aenesidemus' life is unknown and has been the subject of considerable controversy. By some he has been placed as early as 80 B.C., by others as late as 130 A.D.<sup>2</sup> The preponderance of opinion seems to be in favor of the earlier date. We will accept it, then, provisionally, and regard him as a near contemporary of Philo and Antiochus. Born in Crete, he migrated to Alexandria, and apparently taught there the rest of his life. Skepticism now was established upon a broader and a sounder basis which has reminded some modern critics of the systems of Hume and Kant.

**The Relativity of Standards.** Aenesidemus began by exposing the relative and self-contradictory character of sensation and opinion. One

<sup>2</sup> Cf. Brochard, *Les Sceptiques Grecs*, pp. 242 ff.

and the same object, he pointed out, may produce different and opposed impressions upon different animals, including man; upon different individual men; upon the different sense-organs of the same individual; and upon the same sense-organ of the same individual in different conditions and situations. Moreover, institutions, moral standards, and religious beliefs vary in different times and places, and opposed philosophies seem equally convincing to different persons. So far, then, we are obviously dealing with appearances rather than with reality, and with opinion rather than with knowledge and with truth.

Finally, not only do both the percepts and concepts of the same individual at different times, and of different individuals at the same time contradict one another, but concepts in general frequently give the lie to percepts and *vice versa*. Since there is no deciding these various conflicts, no criterion can be found, and truth itself is non-existent, at least so far as we are concerned.

**Attack on Causation.** Aenesidemus reinforces his position by a thoroughgoing attack upon the possibility of giving reasons or causes for anything. We seek, he says, to explain phenomena in one of two ways. We say either that one event is caused by another, or that sensible phenomena are the manifestations of an underlying reality, invisible to the senses but discoverable by the intellect, in terms of which the behavior of phenomena may be interpreted and understood. In Aenesidemus' opinion, neither of these ways of explaining things will work.

The first method fails because physical causation is incomprehensible. We never perceive the act of production of one physical body by another, or of one incorporeal being by another, or of the material by the immaterial and *vice versa*. Nor is it possible to conceive how such production can take place. Hence, since the causal link is both imperceptible and inconceivable, there is no such thing as the relation of cause and effect.

Furthermore, even if it existed, it would be practically undiscoverable because of the difficulties of distinguishing true reasons from false ones, and of disentangling the real explanation from the multitude of seeming causes.

The second method employed by science and metaphysics is even more fallacious. Sensible events no more indicate the existence of an explanatory order outside and beyond them than they do that of a causal linkage of one phenomenon to another. And certainly, even if the sensible world could be regarded as a "sign" of an unseen reality underlying phenomena, it could, because of its self-contradictory character, give us no hint as to what that reality was like. There are,

Aenesidemus concludes, "no visible signs revealing invisible things, and those who believe in their existence are the victims of a vain illusion."<sup>3</sup>

**Attack on Stoic Ethics.** Aenesidemus seems also to have brought the same sort of skepticism to bear upon ethics. After attacking particularly the Stoics, and showing that neither happiness nor pleasure nor wisdom can qualify as *the* good, he concludes that any final and absolute good is in the same boat with absolute truth.

It has greatly puzzled commentators to find Aenesidemus, in spite of his skepticism, also credited with having developed a metaphysical system inspired by Heraclitus. He believed, we are told, that air, which he identified with time and number, was the world-substance, out of which by the separation and the interaction of opposites the universe arose. Motion is of two sorts—qualitative alteration and movement in space. Reason is breathed into the body from the outside and uses the sense-organs as windows for perceiving what is going on inside. The universal character of reason accounts for the possession by different individuals of a common standard of truth.

These scraps of information do not suggest a weighty metaphysics. Its relation to the rest of his thought has received several explanations. By some critics Aenesidemus is represented as having been first a Heraclitean and then turned Skeptical. Others suppose that he is merely giving an account of the Heraclitean philosophy, which later was regarded as an exposition of his own views; still others that he is attributing the Heraclitean doctrine of the interaction and identity of opposites merely to the flow of sensible events, without abandoning his Skeptical attitude with respect to objective truth. Others, again, feel that he really changed his mind as he grew older, and abandoned Skepticism, or rather sought for his Skeptical attitude a congenial metaphysical basis.<sup>4</sup>

## VI. AGRIPPA

For two centuries after Aenesidemus' death we have little or no knowledge of the history of Skepticism. There can be no doubt that the school grew and flourished, for the brilliant renaissance of the movement, which occurred about 200 A.D., shows signs of long preparation. But in that period, only one name, Agrippa, stands out with any distinction, and he is not included in the list of the leaders of

<sup>3</sup> Photius, *Myriob.*, 170 B, 12.

<sup>4</sup> For these differences of opinion cf. Brochard, *op. cit.*, pp. 277 ff.

the school compiled by Diogenes. Of Agrippa himself we know next to nothing. But the teaching attributed to him and his circle codified and gave a finishing touch to the Skeptics' position. We are, they said, confronted with a dilemma. Either we must grant at once the Skeptical contention that absolute truth is non-existent, or at least undiscoverable, and therefore suspend our judgment, or we must embark upon a course of investigation in the hope of discovering it. The latter course leads us nowhere except to an eventual suspension of judgment, since no first cause in a series of so-called causes and effects can ever be found, and no explanatory concept of the sensible world as a whole can ever be reached that does not itself have to be accounted for. In both cases we are involved in an infinite regress. Nor is there any such thing as self-evident truth—witness the deceptions of the senses and the quarrels of the philosophers. It is not only, then, impossible as a matter of fact to discover the truth, as the older Skeptics had shown; the search for truth is itself invalidated from the start by its logical difficulties. Why, then, should we waste our time and disturb our peace of mind by seeking what we know beforehand it is impossible to find? We had far better suspend our judgment at the beginning, cease from vain questionings, and settle down to live happily by probabilities alone.

#### VII. SEXTUS EMPIRICUS

**The Empirical School of Medicine.** We turn now to watch the last lap and the final spurt of ancient Skepticism. The runners were all doctors associated with the "empiric" school of medicine, which founded its practice directly upon the observation of individual cases and the inferences drawn therefrom, rather than upon general theories regarding the nature and causes of different diseases. This school was already very old, dating back, as it did, to the middle of the third century B.C.

By the middle of the first century A.D., it turned to philosophy, had become addicted to Skepticism, and had produced two thinkers of some note, Theiodas and Menodotus. But it remained for Sextus Empiricus, a couple of generations later, to combine the empirical attitude of his medical training with philosophic skepticism.

**Sextus' Writings.** The life of Sextus is obscure. He was a Greek. He taught about 200 A.D.—exactly where is unknown. Three of his works have been preserved: one, a general résumé of Skeptical arguments,

the two others attacks respectively upon the scientists and the philosophers.

These books are a mine of interesting and valuable historical information, but they do not add much that is novel to the critical possibilities of Skepticism, which had already been pretty thoroughly probed and realized by Sextus' predecessors. To Aenesidemus' contention that the existence of an external world cannot be inferred from sensible experience, he does *add, however, that even the attempt to infer universal characteristics of the sensible world from the observation of particular instances is likewise foredoomed to failure.* For how can we know that any characteristic is universal until we have ransacked the entire universe—all space and all time—which we can never do? Hence so-called universal forms, types, laws, etc., are relative to time and place and to the range of our powers of observation.

**Self-Contradictory Nature of Concepts.** Again, Sextus continues, amplifying the position of Aenesidemus, not only is the concept of causation unintelligible, but so, too, are the concepts of body, space, time, generation, and the like, habitually used by philosophers. Upon examination all of them turn out to be riddled with self-contradictions. Even mathematics will not hold water.

But if logic, physics, and mathematics are full of contradictions and can give us no absolute truth, what shall we say of ethics? Ethics aims at discovering and defining the good. Confusion now becomes worse confounded—witness not only the diametrically opposed views of the nature of the good taken by the moralists, but the diverse and conflicting ethical practices of mankind. Certainly, then, there is no single, universal *natural* good, revealed to all men alike.

Again, pursuit and desire are the root of all evil. They involve dissatisfaction and discontent and disturbing hopes and fears. And their satisfaction, far from being desirable, only too often proves to be vicious. Virtue, too, involves unhappiness. It rests upon temptation and struggle.

All in all, we are left with the paradox that the good is at the same time bad. The good, then, does not exist. The pretense of ethics to discover what it is, and to teach men how to attain it, is a pretense and nothing more. In ethics, as elsewhere, complete suspension of judgment is the only sound attitude.

**Adequacy of Empirical Rules of Behavior.** But Sextus, like the other Skeptics, is quick to point out that suspension of judgment does not paralyze action. Empirical rules of life, like empirical rules of medicine, can be drawn from observation of individual cases. These rules



make up the body of what we call common-sense. Nature indicates to us a certain way of life. She has given us as guides our senses, our instincts, and our intelligence. It is the part of the wise man to conform to ourselves as we find ourselves. It is sensible to accept and accommodate ourselves to the social organization into which we are born, to obey the laws, respect the institutions, including religion, and the conventions of the society in which we live. There is nothing transcendent or metaphysical about these things. They are facts of experience.

Nor should we merely conform. We should progress. Though truth and certainty in any matter are unobtainable, and dogmatic assertions of every sort are ridiculous, we may learn much from observation. By noting and studying similar cases we may establish provisional probabilities that are of great use. Methodical observation of this sort gives us arts and sciences to which a Skeptic may devote himself without infidelity to his basic suspension of judgment. Organized scientific investigations can be profitably undertaken with no other basis than the observation of phenomena, and with no further end than the establishment of probability. Absence of certainty and the necessity of suspending judgment with respect to ultimate questions do not render scientific investigation and speculation fruitless. Their theory and practice of medicine had given the Empirics an inkling of a new and fruitful line of approach. Indeed, it has been suggested that the inductive method of modern science, set forth by Bacon and developed in the last century by John Stuart Mill, had begun to dawn upon them.<sup>5</sup>

**Contemporaneous Renewal of Speculative Philosophies.** In following Skepticism straight through to its final phases we may have received a false impression of the history of philosophy as a whole. The blank intervals, we noted, so empty of any news about the development of the Skeptical movement, do not mean that philosophy itself was dormant. They represent merely moments when the fortunes of the Skeptical movement are obscure. But they are full of information about the progress of new currents of thought that originated long before Sextus Empiricus and were fast approaching their high-water mark in his time. As early as the first century B.C. these currents were in existence, and, when Skepticism was having its last great outburst, they had swollen to a flood of speculation and thinking that aimed at solving precisely the problems declared by Sextus and his predecessors to be insoluble. This renewed constructive activity looked back

<sup>5</sup> Cf. Brochard, *op. cit.*, pp. 375 ff.

to the Pythagoreans for its inspiration and guidance, as well as to Plato, who after a period of eclipse which we have already remarked, came into his own again and dominated both the rise of the new secular philosophy and the formulation of Christian theology. Let us then turn time backward in its flight and watch the growth of Neo-Pythagoreanism and Neo-Platonism.

## *Chapter XIX*

# THE NEO-PYTHAGOREANS

### I. THE ORIENTAL CULTS AND THEIR INFLUENCE UPON PHILOSOPHY

**Revival of Religious Pythagoreanism.** Pythagoreanism, we may remember, lasted but a short time as a distinct philosophic school. But it was more than a philosophy. It was a religious brotherhood inspired by the Orphic Mysteries, and retained, if not their elaborate theology, at least such essential tenets as the divine origin and the fall of the soul and perhaps, though this is disputable, her eventual escape from the wheel of birth and re-birth and reunion with the godhead from which she sprang. As a religious cult, Pythagoreanism seems to have lived on after its philosophical doctrines had become only a memory and a tradition, and, as early as the second century B.C., after a hundred and fifty years of obscurity, we find it emerging again as an active and an increasingly influential sect. By the beginning of the first century it was becoming philosophical again, harking back nominally to original Pythagorean doctrines for its inspiration, but also appropriating much from Platonic and contemporary Stoic thought. This revival of Pythagoreanism as a philosophy seems to have begun in Alexandria and to have spread from there to Rome. Among these early Neo-Pythagoreans we may mention Apollonius of Tyana, also celebrated as a magician and a soothsayer, and Moderatus of Gades.

**Sterility of Roman Religion.** The revival of the Orphic-Pythagorean religious cult was incidental to a rising tide of religious interest and fervor that was creeping into the Roman world from the Near East as early as the second century B.C., and that four hundred years later had completely engulfed the Empire. Since it swept philosophical speculation along with it, we shall do well to pause here for a moment and watch its progress. We may note at once that the religion of ancient Rome, grounded as it was in an unimaginative and practical temperament, had little to offer the devout. It promised no salvation, it held out no hope for a happy immortality in which wrongs might be redeemed and tears might be wiped away. It offered no consolation in time of sorrow and no support in the moral struggle of good against

evil. It knew nothing of an inner and direct communion of the soul with the divine. It did indeed identify its principal deities with the Olympian gods, but these serene and beautiful beings, deprived of the passion for a perfected human life and of the worship of the ideal by which they were fructified in Greece, were dwarfed and withered when grafted on the Roman stock.

**Influx and Popularity of the Oriental Cults.** Roman religion had already become mere lip-service for many people before the fall of the Republic, and indifference to it became progressively more widespread and more profound under the Empire. And this, in spite of strenuous attempts made from time to time by the state to reinvigorate the established cult and to stamp out its competitors. But these were too strong and too appealing to be withstood. They offered everything that the established cult could not give—salvation, immortality, direct communion with the divine, help in the struggle of good against evil, and often, if not always, the intervention and the aid of a redeemer, a dying and a rising god, whose death and resurrection not only guaranteed his worshipers against death, but held out the hope of eventual triumph over evil and reunion with deity. Furthermore, these consoling theologies were presented in alluring and impressive form, with a highly pictorial and often magnificent ceremonial and liturgy, and with sacramental rites of initiation and purification, and generally of union with the deity by partaking symbolically of his divine substance. Add to this the secrecy with which some of these mysteries were celebrated and the sense of brotherhood and of intimate relation with God that they fostered, and we have every reason for understanding their fascination. To be sure, in both their teachings and their rituals the Oriental cults continued to betray the gross and barbaric origins from which they sprang. For example, even to the end, the devotees of Mithra were literally bathed in the blood of a bull actually slaughtered for their salvation. Nevertheless, most of these sects gave to their doctrines and ceremonies, however crude, a moral and spiritual significance.

**The Various Mystery-Religions.** Shortly after the Second Punic War the cult of Dionysus appeared in Rome. But its Bacchanalian rites so shocked the Romans, who suspected in them every sort of debauchery, that they were rigorously suppressed by the government. The first Oriental religion to be introduced was the worship of the Phrygian goddess Cybele, the Great Mother, and of her lover Attis, a dying and a rising god akin to Dionysus—at the instance, it is said, of the Sibylline books, which prophesied that by her Rome might be saved from

Hannibal. A century later, we find in the Italian seaports an established cult of Isis and of her divine spouse Osiris, or Serapis, as he was re-baptized by the Ptolemies when they adopted him as the national god of their Hellenized Egypt. Slaves and merchants from Syria brought with them the goddess Atargatis, sometimes identified with the Phoenician Astarte, and from Phoenicia came also the worship of the dying and rising Adonis. Much later, from Syria, there was also to be introduced the adoration of *Sol Invictus*, the unconquerable Sun. Meantime, Persia had sent another sun-god, Mithra, the lover of truth and justice, who wages ceaseless warfare against the powers of darkness to the furtherance of the kingdom of Ormuzd, the lord of good and light. He was the soldier-god, adored by the far-flung Roman legions, and it is he whom, if Christianity had not won out in its long struggle with the other Oriental cults, the western world might perhaps be worshipping today.

These deities had so much in common not only with one another but with the Graeco-Roman gods, that they easily became confused and merged—Attis and Osiris, for example, with each other and with Dionysus; Isis and Atargatis with Aphrodite or Venus; Mithra with Apollo. Then, too, Mithra soon came to figure as the husband of the Great Mother, and their cults were, so to speak, in communion, if not actually amalgamated. Needless to say, all these affinities with the gods of Greece and Rome made the assimilation of the Oriental deities all the more rapid and the more easy, though it should be said that at first most of the new religions were viewed somewhat askance, and in some cases there were repeated attempts to suppress them. But in Imperial times they came into their own, and it was in them that the great mass of the religiously minded throughout the Empire, the educated and uneducated alike, sought and found peace and salvation.

**Influence of the Mystery-Religions on Philosophy.** It is not surprising that the revival of philosophic speculation, nurtured in the atmosphere created by these religious movements, was itself theological and mystical in character. Nor was it altogether out of keeping with the despair of reason, rampant in Skepticism and increasingly apparent in Stoicism, which had become a prevailing philosophic mood, that the new speculations should seek access to the Real more by feeling and intuition than by the processes of logical thought. At the same time, it should be said, these philosophies did not substitute feeling for thinking all along the line and ignore altogether the claims of logic. On the contrary, they followed reason as far as it could lead them, and under its guidance developed an elaborate and subtle metaphysics,

which converged from all sides upon the nature of the Real. It was only when rational thinking finally cracked its teeth upon a core of problems seemingly impenetrable by the power of the intellect that metaphysics turned for strength to immediate intuition and mystical "ecstasy" in which Reality was felt rather than known.

## II. NEO-PYTHAGOREANISM

**Diversity of Philosophic Speculations.** Influenced as the new speculations also were by the whole history of philosophy up to date, they were highly eclectic in character and led to many divergent conclusions. The revived Pythagoreanism, for example, whose outlines we are about to sketch, was greatly influenced by Plato and Aristotle and the Stoics. It harked back, to be sure, to the original distinction drawn by the ancient Pythagoreans between unity and plurality, the odd and the even, the limited and the unlimited, and to their identification of the divine and the good with the one, of the evil and the earthly with the other, of these two fundamental principles. But with regard to the nature of God and of his relation to the world there was great diversity of opinion. Some, influenced by the Stoics, regarded him as the Soul of the universe, and incidentally identified him with the Platonic World-Soul. Others separated the godhead from the cosmos, and explained his relation to it after the fashion of Aristotle or of Plato in the *Timaeus*. Still others regarded God as a principle indescribable even in terms of being or thought or reason or unity, a mystical and ineffable "Monad" from which unity and plurality, the odd and the even, form and matter alike proceeded.<sup>1</sup>

By these last particularly, the Pythagorean Numbers, the Platonic Ideas, the divine workman in the *Timaeus* and the Stoic *logos spermatikos* were combined in a creative World-Reason, generated by God, which is both the intelligible structure of the universe and the creative power by which the world is called into being and given form and stability. The Platonic World-Soul was also invoked by them as a mediating principle.

**The Four Principles.** Metaphysically, then, the Neo-Pythagoreans present us with four principles—God, the World-Reason, the World-Soul, and Matter. The first three play an important part in the formulation of both the Plotinian and the Christian trinities. The status of

<sup>1</sup> The early Neo-Pythagorean sources have been collected and published by Mullach, *op. cit.* Cf. also Zeller, *Philosophie der Griechen* (4th ed.), III, ii, pp. 115 ff.

the fourth variously conceived as identical with God after the Stoic fashion, as co-eternal with him, or as derived from him, led to a long controversy which culminated in the Plotinian theory of emanation, on the one hand, and the Christian doctrine of creation out of nothing by divine fiat, on the other.

Needless to say, the necessity of explaining evil and imperfection loomed large in such speculations. Those who inclined to Stoic pantheism, or later to the theory of emanation, not unnaturally made much of the Stoic arguments for reconciling imperfection in the part with the perfection of the universe as a whole, while those who made a clear-cut distinction between God and the universe fell back upon Matter as a scapegoat. The general spirit of Neo-Pythagoreanism was, however, true to the metaphysical dualism of Pythagoras and Plato.

**Epistemology and Physics.** In their theory of knowledge and in their physics and geometry the Neo-Pythagoreans followed Plato for the most part. Like him they mounted from *sensation* to *opinion*, and from *opinion* through *understanding* to pure *reason* which simply contemplates the truth. As with Plato again, the sensible world is the image of the intelligible, and its manifest failure to imitate the perfection of its model is explained away by the means we have just been noting. Whether it had a beginning in time, as Plato intimated in the *Timaeus*, or was uncreated and eternal, as Aristotle maintained, appears to have been a disputed point.

**Psychology.** In psychology, the Neo-Pythagoreans combined, as the older Pythagoreans had done, the doctrine that the soul is essentially a harmony with the Orphic teaching that she is immaterial and immortal. But apparently they laid little stress on reincarnation. Also, they adopted Plato's division of the soul into three parts and identified her highest, rational part with the Aristotelian reason. Besides human souls there were also "daemons," or guardian angels, some good, some bad, who tempted human beings or protected them, as the case might be. The gods of the popular theology were also easily worked into this scheme, and the Neo-Pythagoreans had no quarrel with the established religion.

**Ethics.** For their moral guidance in this world the Neo-Pythagoreans developed an ethics that added little or nothing to the moral teachings of Plato and Aristotle. But, like Plato himself, they supplemented this ethics with an anti-worldly theory of the ultimate destiny and salvation of man, inherited from the Orphics. The world and the flesh were regarded as the enemies of the spirit, and redemption as a flight of the soul from the fetters of the body and the senses to her

divine source. Their discipline for suppressing and escaping from the senses and bodily desires seems to have been only mildly ascetic. It consisted for the most part of ceremonial purifications, including abstinence from certain foods. But, unlike the rules governing the early Pythagoreans, it did not forbid the eating of meat or the drinking of wine. Nor did it advocate celibacy, though it did insist that sexual relations should be motivated, not by the promptings of nature, but solely by a due regard for propagating the species.

**Veneration of Inspired Teachers.** Like all religiously inclined philosophies, Neo-Pythagoreanism had leaders whom it venerated as teachers specially gifted and inspired from on high. Naturally it turned back to Pythagoras himself as the source of the truth and light of which it regarded itself the vehicle. Indeed, we owe to it most of the legends of magical powers and prophetic gifts and peculiar intimacy with the godhead that gathered about him and almost turned him into an incarnation of the deity. But it also found more contemporary inspiration in Apollonius of Tyana, whom it invested with the same superhuman experiences and powers. His biography, written many years later by Philostratus, is one of the most valuable documents we have relating to the Neo-Pythagorean movement.

As we must have already noticed, the Neo-Pythagoreans drew almost, if not quite, as much upon Plato as they did upon Pythagoras for inspiration. Indeed, except that the Platonic influence had not become so marked or so dominant as it became later, the new movement might be described as a revival of Plato. In Plutarch, however, to whom we are about to turn, the Platonic influence is so strong that we may describe him as even more inspired by it than by the Pythagoreans, and as therefore an important contributor to the development of Neo-Platonism. Moreover, he is the first philosopher to give a really extended and systematic expression to the speculative revival and to fuse the elements entering into it. As we shall see, the general characteristics of Neo-Pythagoreanism which we have just been describing almost all hold true of him.

### III. PLUTARCH

Plutarch is already familiar to us as the author of the famous *Lives*. Born at Chaeronea about 48 A.D., he studied first mathematics, and then, at Athens, philosophy. Later he visited Rome on business connected with his native city, and there learned Latin, began his acquaintance with Roman literature, and also made many personal



friends. He was chosen archon and priest at Chaeronea, and appointed one of the overseers of the Pythian Games. He died between 120-125 A.D. He was a prolific writer, and fortunately, besides fifty of his biographies, some eighty-three of his other writings and fragments of another twenty-four have been preserved for us.<sup>2</sup>

**The Transcendency of God.** Widely read in philosophy, he detested the Epicureans, disliked much in Stoicism, and was attracted by Plato, Aristotle, and the Pythagoreans, who appealed to his serious and religious temperament. For him, God is the only wholly actual and existent being, self-caused and self-sufficient, pure and undivided unity, the good that knows no jealousy, the reason that governs all things. Even these epithets, however, do not exhaust or describe his essence. When all is said and done, we can only know *that* he is, but not *what* he is, so far removed is he from the material and sensible universe and from the concepts and words at the command of our finite and fallible intellects.

**Dualistic Solution of the Problem of Evil.** So high and so holy a God cannot be regarded as in any way responsible for the evil and the imperfection in the world. The Stoic attempts to reconcile sin and suffering and the hostile activities of nature with the goodness, the omnipotence, and the universal providence of the deity are one and all rejected by him. Even a material principle distinct from and co-eternal with the divine cannot account for imperfection. For Matter is but clay in the potter's hands, and not from it but from them comes the good or evil form in which it is molded. In addition to Matter, then, there must be, as Plato taught in the *Laws*, a diabolic activity, or bad world-soul, positively opposed to God, whose workings are responsible for the shortcomings of the world.

It is possible that Plutarch's insistence upon an evil world-soul was inspired not only by Plato's arguments in the *Laws* but also by the Persian doctrine that two co-eternal principles, Ormuzd, the spirit of good and light, and Ahriman, the spirit of darkness and of evil, are ceaselessly at war in the universe.

To the Aristotelian view that the universe is uncreated and eternal Plutarch opposes the Platonic teaching that it had a definite beginning and creation at the hands of God. As with Plato, this act of creation is not direct. God is too remote for that. It is accomplished through the

<sup>2</sup> For Plutarch's metaphysics, cf. especially *De Isi et Osiride*; *De El apud Delphos*; *Non posse suaviter vivi secundum Epicurum*; *De defectu oraculorum*; *De animae procreatione in Timeo*; *Platonicae quaestiones*; *De Stoicorum repugnantiis*; *De fato*; *De facie in orbe lunae*.

agency of a good world-soul, like that in Plato's *Timaeus*, which God makes from his own divine essence and infuses into matter, and by the activities of lesser gods and angels.

**The Lesser Gods and Souls.** Besides the good and evil world-souls there are also individual spirits, some good, some bad. The stars, the nearest of all corporeal things to the divine, have, as with Plato and Aristotle, their presiding deities, and below them are ranks of angelic beings mediating between God and man. Through them God and the lesser gods exercise their moral government of the world, using them as instruments for punishing the wicked and rewarding the virtuous both in this life and the next. Some of these "daemons," however, like human souls, possess free will and may fall into evil ways, and may even be reduced to human estate. Contrariwise, good men may rise to the angelic level, and the angels may become equal to the lesser gods.

The human soul inherits from both the good and evil world-souls, and in her both dispositions are inextricably interwoven. From the one come the senses and the bodily desires and everything that knits us to the world and the flesh; from the other comes our reason, which is a "daemon" within us. The lower soul is divided Platonic-wise into spirit, or will, and appetite. At death the rational part of the souls of the good rejoins the angels, to remain with them forever, or to be reincarnated again in human bodies, according to its merits. The souls of the wicked may be incarnated as animals. Upon immortality Plutarch lays great stress.

**The Freedom of the Will.** The freedom of the will is also emphasized by Plutarch. He is untiring in his attacks on the Epicureans for denying it outright; apparently he took little stock in their championing of freedom, and in the doctrine of the deviation of the atoms they invented to accommodate it to Democritus' teaching. The Stoics, also, were upbraided for the destructive determinism that lurked, he felt, in their theory of a providential government of the world, and also for their pantheism and their attempt to reconcile the existence of evil with the omnipotence of God. All suffering, Plutarch thinks, is the just wages of sin, for which man is wholly responsible, since it lies within his power to withstand the promptings that arise from his lower nature and from the evil world-soul with which it is associated, and to follow the dictates of his higher, rational self.

**Physics, Psychology, and Ethics.** Plutarch's physics is in the main Platonic, and contains little that is new or noteworthy. He follows Aristotle, however, in adding a fifth element—ether—to the conven-

tional four. He also argued for a plurality of worlds, both co-existent and successive. His psychology, too, is largely Platonic, with Aristotelian additions. He accepts Plato's division of the soul into three parts, and he adds the vegetative and sensitive functions ascribed to her by Aristotle.

In spite of his extreme metaphysical dualism, Plutarch's ethics has little or nothing of the asceticism that we might expect such a view to breed.<sup>3</sup> The morality that appealed to him was that of Aristotle, and his own teaching is derived largely from the *Nicomachean Ethics*. With the Epicurean insistence that pleasure is the good he had as little sympathy as with their supposed denial of free-will. But he was equally opposed to the Stoic doctrine that pleasure and external goods and the activities and fortunes of our bodies have no bearing upon human happiness. These things are not indifferent to us, neither is happiness obtainable by merely ignoring and rendering ourselves callous to them. Our instincts and desires, our passions and emotions, are part of the nature with which God has endowed us, and, freed from the promptings of the evil world-soul, directed by reason, and subjected to the rule of the golden mean, they are necessary and important elements in the good life. Nay more, man is a political animal, as Aristotle said. His happiness comes, not from withdrawing so far as possible from social and political activities, but from participating in them to the best of his ability. Politics or statesmanship is the noblest of human occupations. Great responsibilities are laid upon those entrusted with authority, who should labor unselfishly and wholeheartedly for the good of the community. Monarchy, Plutarch feels, is the best form of government, but the monarch must act as the representative and the servant of God. Still, when all is said and done, man attains his final peace and salvation not in good works alone but rather in an inner life of religious experience.

**Religion.** Atheism, which destroys this experience and knowledge of God and impoverishes man's spiritual nature, is one of the most terrible things that in Plutarch's eyes can befall a human soul. Equally bad is superstition, which is exemplified by the unworthy stories and ideas about the gods current in the popular theology. With polytheism itself, however, provided it is rightly understood, Plutarch has no quarrel. To be sure, there is only one true God, the God of all men and of the whole universe. But this God reveals himself in many ways, and the popular gods are simply the many aspects under which he is

<sup>3</sup> For Plutarch's ethics, cf. *De virtute morali*; *De projectibus in virtute*; *De communibus notitiis*; *De virtute et vitio*; *De tranquillitate animi*.

seen, as through a glass darkly, and the many names by which he is worshiped and glorified in different times and places. So, too, the theologies centering about the various divinities are all in their way intimations of the nature of the true God and of his ways with man.

Nor is the popular belief in the supernatural character of oracles and dreams wholly to be scorned. When we sleep, our souls are freed from the fetters of the senses and are in better condition to consort with the divine and to receive revelations from it. The same severance of the soul from the body with increased power of insight and prophecy may also be brought about by artificial means, as for example, the vapors that issue from the earth at Delphi. Hence, under these conditions, the priests and priestesses of oracles may also be considered to be divinely inspired, though the popular attitude towards them and trust in them is infected with superstition.

#### IV. THE LATER NEO-PYTHAGOREANS

**Maximus of Tyre.** The next philosopher of note after Plutarch to expound this mixture of Pythagoras and Plato was Maximus of Tyre, who taught in the first half of the second century A.D. In general outlines his system differs little from that of Plutarch.<sup>4</sup> God, however, he identifies with the pure reason that Aristotle had made the essence of the divine nature, and Matter he regards as a sufficient explanation of the imperfection of the universe, without bringing in an evil world-soul. Sin springs from misuse of free-will in following the promptings of our lower sensual nature rather than our reason. The soul is a spark of the divine, momentarily imprisoned in the body, but destined, if virtuous, for a happy release and reunion with her source. Between God and man there intervenes a hierarchy of lesser gods and spirits, or "daemons," who act as the guardian angels of men and servants of divine providence.

**Apuleius.** Along with Maximus we may also mention Apuleius of Madaura in Numidia, still famous as the author of the *Metamorphoses*, or *Story of the Golden Ass*, with its interlude describing the marriage of Cupid and Psyche. His metaphysics follows that of Maximus, but with greater elaboration of detail. Between God and Matter he inserts not only a hierarchy of gods and angels, but the Platonic Ideas and Reason. The hierarchy itself he expanded to include, not only the visible gods of the stars, but the Olympian deities and a descending

<sup>4</sup> For most of Maximus' philosophy we have original sources in his *Dissertations*, which are extant.

order of angelic beings terminating in the human soul. Salvation lies in freeing the soul from the fetters of the world and the flesh in which she is temporarily imprisoned. The story of Cupid and Psyche seems to be used by Apuleius as an allegory of her fall and redemption.

**Albinus and Atticus.** The same multiplication of mediators between God and the world is found in Albinus, who inserted the World-Soul as well as the Platonic Ideas into the hierarchy, and also consigned the creation of the world to the lesser gods and angels on the ground that God himself was too far removed from material things to handle them directly. With Aristotle, however, as against Plutarch, Albinus maintained that the universe was not created in time but was eternal.

Atticus, however, another of the successors of Plutarch, upheld the doctrine of creation in time, and also re-introduced the evil world-soul, which Maximus and Apuleius had dropped from their systems.

**Numenius.** In Numenius of Apamea philosophy takes a quite appreciable step forward. Indeed, Plotinus was accused of having plagiarized his teaching. Numenius deliberately casts aside Neo-Pythagoreanism and Neo-Platonism up to date and goes back to the original sources for his inspiration. But he finds that both Plato and Pythagoras were themselves the interpreters of an earlier wisdom, which they found in the teachings of the Brahmins, the Magi, the Egyptians, and the Jews. For Moses he had a great veneration, and considered Plato a Greek twin of the Hebrew prophet. It is said also that he spoke of the teaching of Jesus with respect. In that case, he differs from his contemporary and fellow Pythagorean-Platonist, Celsus, who, inspired also by a strain of Stoic determinism and naturalism, accused Christianity of being a superstitious and fantastic degradation of Platonic doctrine.

Numenius' system <sup>5</sup> is even more dualistic than that of Plutarch. On the one hand, we have a God, identified with the Reason of Aristotle, the Monad of the Pythagoreans, and Plato's Idea of the Good, so high and so remote as to be altogether inactive and out of contact with the world. Hence he can have nothing whatsoever to do with the act of creation. The universe is the work of a "Second God" derived from, but inferior to, the supreme Deity, and the universe itself may be called the "Third God." We have, then, at this point, three Gods, the Father, the Creative Agent generated by him, and the Created World.

The Second and Third Gods, however, have a dual nature. The Second, though sprung from pure spirit, is also in contact with Matter

<sup>5</sup> Our knowledge of Numenius is largely drawn from Eusebius, Porphyry, Chalcidius, Iamblichus and Proclus.

and is the indwelling good soul of the universe. The Third God is a mixture of the divine soul and of Matter. But Matter is also animated by an active, evil principle that opposes the divine soul and is responsible for the imperfection of the universe. Hence to the three Gods we must add a sort of devil.

Man, being both spiritual and corporeal, rational and irrational, participates in both world-souls. Their conflict within him constitutes his moral life. At the same time, Numenius, like Plutarch in somewhat similar metaphysical circumstances, refuses to turn ascetic in his ethics. The activities of the body are not in themselves evil. They become so only when they cease to be governed by reason and fall a prey to the irrational and evil world-soul. Nevertheless, the descent of the rational part of the soul into the body represents a fall from a higher to a lower state. Salvation lies in an escape from corporeal and sensible existence and in a reabsorption of the soul into her divine source. This can be accomplished only through a long series of reincarnations. Meantime, it behooves us in this life to cultivate our reasons and to commune with God.

**The Hermetic Writings.** We may as well here glance at the so-called *Hermetic writings*, though they belong to the last half of the third century, and are therefore later even than Plotinus. However, they seem to reflect speculations of an earlier period and belong to the line of development we have been tracing. They purport to be the revelations of the god Hermes to his disciples. By whom they were written or assembled is uncertain. There is little that is novel in them. They push the exaltation of the First God to a point where it becomes almost completely mystical, though they still attribute to him reason and will. From him, intellect proceeds as light from the sun, and from intellect proceeds soul. The soul has need of a mediator between herself and Matter, which is supplied by air or breath. Matter is an inert and formless principle, but is so completely organized and molded by the divine that the universe may be called the Second God or the Son of God. In this connection the Christians are attacked for scorning and vilifying the world, and the Gnostic sects are berated for the teaching, which we have also found in Numenius, that God himself is too good to be its creator. At the same time, when it comes to explaining imperfection and evil, there is an inconsistent and even contradictory change of face. Matter is at the root of all that is bad. There can be no commerce between the spiritual and the material, between the changeable, sensible world and the divine. These two opposed points of view were left unreconciled.

The promotion of the universe to the rank of Second God leaves the position of Third God open for man himself. Our souls and reasons are derived from the divine, and may return to the deity if we practice piety and virtue here below.

In ethics, the inconsistency we have just noted in the Hermetic treatment of the sensible world reappears. On the one hand, we are told to turn our back upon the world and the senses and to seek direct inner communion with God. On the other, we are warned that to despise the world, in which we live, is sinful. Nay more, we are enjoined to follow the practices of the established religion, and even to set up for worship graven images of the gods, to which the Hermetic writings attributed magical powers such as prophecy and healing and the ability to evoke and exorcise spirits.

## *Chapter XX*

# THE HELLENIZING JEWS AND PHILO JUDAEUS

### I. THE HELLENIZING JEWS

Of all the peoples with which Hellenic civilization and philosophy came in contact, the Jews might seem the most impermeable. Their social isolation, the intensity of their national, cultural, and religious antipathies, their uncompromising monotheism, their conviction that Jehovah was the only true God, their sense of being a chosen people favored by a divine revelation that was vouchsafed to them alone, their detestation of polytheism and their contempt for the gods of other peoples—all this was calculated to harden them against the dissolving influence of the Hellenic civilization in the midst of which they had lived engulfed since the conquests of Alexander, or, at any rate, since the Roman domination of the Mediterranean world. Still, the impact of the Graeco-Roman environment proved too much for them, and they became partially merged with, though not submerged by, the alien civilizations by which they were surrounded. There was, to be sure, a conservative, "orthodox" element which, still deep-rooted in its ancestral Palestine, clung stubbornly to the traditions, the mode of life, the way of thinking, and the disdainful isolation of the past. But this element seems to have been deeply fringed with what we call "liberal" Jews.

**Influence of Plato on the Alexandrian Jews.** In cosmopolitan Alexandria, where there had been a large Jewish colony since its foundation, these liberal tendencies were most marked; for here Hebrew thought and culture were in their most widespread and intimate contact with Hellenic influences, and particularly with Greek philosophy. So it is that possibly as early as the third century B.C. Jewish thinkers there had begun to read the Greeks, and especially Plato, and to find in them suggestions of their own doctrines. Indeed, it has been argued that the so-called Septuagint, or translation into Greek of the Old Testament made during the first half of the third century B.C., shows traces of Greek philosophic influence in some of the words and phrases



used to render the Hebrew originals. In *Ecclesiastes*, probably written during approximately the same period, there are also hints of Stoicism. The *Book of Wisdom*, a work of the first century B.C., is clearly imbued with Greek philosophy, and its treatment of the divine wisdom as a reflection and mirror of God's glory, almost separate from him, is directly in line with the development of the doctrine of the Logos, soon to be expressly set forth by Philo, and later to be incorporated by Plotinus and Christian theology.

**Philosophy Enlisted in the Service of Revelation.** The Hebrews, however, approached philosophy in a spirit quite different from that of the Greeks. To the latter it was a free inquiry into the nature of the Real, whose results were the nearest approach to truth the human mind could make. But to the Jews the truth had already been revealed by Jehovah through the mouths of the Prophets. It needed no establishment by the exercise of reason. The most that reason and philosophy could do was to testify to the accuracy of the Old Testament revelation, and to defend it by rational and metaphysical argument against rationalistic and philosophical attacks. The Jewish thinkers then, who interested themselves in the Greek systems did not look to them for further light upon the nature of God and the world. They were fascinated rather by the hints they seemed to discover that the Greeks had seen as through a glass darkly what they themselves, by divine favor, had been permitted to see face to face. They were everywhere on the lookout for foreshadowings and analogies and agreements, which they often pressed to fantastic extremes. For instance, Aristobulus, an Alexandrian Jew of the second century B.C., in his eagerness to establish parallels and relations between Greek and Jewish thought, went so far as to claim that both Plato and Pythagoras had been influenced by an early Greek translation of the Old Testament. In him we see also another characteristic tendency of the times. Influenced apparently by the more abstract concepts and terms of the Greek thinkers, he finds philosophical equivalents for the pictorial and anthropomorphic expressions used by the Prophets in speaking of Jehovah. Thus "the hand of God" is a figurative way of referring to his power, and his appearance to Moses on Sinai in the form of fire is not to be taken literally, but should be regarded as a kind of vision or pictorial representation of an inner and invisible revelation.

**Spread of Graeco-Roman Influence to Palestine.** Meantime, even in Jerusalem and Palestine, which were the stronghold of orthodox Jewry, Hellenic influences were making themselves felt. Palestine was now a subordinate part of a larger world, not only politically, but culturally,

to whose existence and character, to whose ways and whose thoughts, it could not blind itself. It was invaded year after year by "liberal," Hellenized Jews returning to the fatherland. It had to learn Greek. It had even to Hellenize its Hebrew names. Hence, as early as the second century B.C., there was already in the capital a considerable liberal, pro-Hellenic element.

It is also possible, though the point is in dispute, that acquaintance with the Neo-Pythagorean order had some influence upon the Essenes, a communistic, ascetic Jewish sect, already in existence by the middle of the second century B.C. This secret brotherhood, which exacted a long novitiate, held all property in common, condemned slavery, advocated the brotherhood of man, and not only preached but practiced virtuous living and love of God and of one's neighbor. Their tenets and their life so resembled that of the early Christians that it has been suggested that John the Baptist and even Jesus himself came in contact with them. In connection with the Essenes, we may mention, also, the Therapeutae, an ascetic, semi-mystical brotherhood of Egyptian Jews, who, like the Christian hermits of a later age, retired from the world to the desert to lead there in scattered communities a solitary life devoted to worship and contemplation.

## II. PHILO JUDAEUS

**Hebrew Theology Modified by Greek Philosophy.** When we come to Philo, an Alexandrian Jew, born in the last quarter of the first century B.C., it looks as if Hellenic influence and the impact of Greek philosophy had succeeded in making a very real dent in the substance of Hebrew theology.<sup>1</sup> Philo considered himself orthodox, accepted the infallibility of Moses, and never doubted that the Old Testament was a direct and ultimate revelation of the truth on the part of God. At the same time, his wide and thorough acquaintance with the history of Greek philosophy and his sympathy with its teachings led him far beyond his predecessors in drawing parallels between Hellenic and Hebrew thought and in developing an allegorical interpretation of the words of the Prophets. Not only Plato and the Neo-Pythagoreans, but the earlier thinkers, contemporary Stoics, and even Skeptics had

<sup>1</sup> The main features of Philo's philosophy are set forth in his *De cherubim*; *De somniis*; *De allegoriis legum*; *De opificiis mundi*; *De sacrificiis Abelis et Caini*; *De migratione Abrahami*; *De Abrahamo*; *De providentia*; *Quod Deus sit immutabilis*; *Quis rerum divinarum heres sit*; *De eo quod deterius potiori insidiatur*; *De profugis*; *De vita contemplativa*.

all in their several ways guessed at the truth of which, in its fullness, the Scriptures were the chosen repository. Philosophers and prophets alike were all setting forth in different allegorical forms the same essential ideas. Even polytheism, so abhorrent to the orthodox Jew, was not to be condemned as wholly false. The Greek gods, far from being the evil spirits that the Hebrews generally considered them, were in part personifications of natural phenomena, in part, as Euhemerus had maintained, memories of ancient heroes. God is so high and so removed that he cannot be comprehended, but must reveal himself indirectly through myth and allegory to the finite human mind.

**The Transcendency of God.** Philo's system is of the dualistic sort with which Neo-Pythagoreanism has already made us so familiar, but it is obviously dominated by Platonic teaching, somewhat modified, however, by Stoic influence. Upon the transcendence of God and the consequent cleavage between God and the world Philo insists even more vehemently than his predecessors. God, like the Platonic Idea of the Good, escapes in the end every attempt to describe or define him, even by the highest and most abstract terms at our command. He is beyond goodness, beyond beauty, beyond holiness, beyond unity. Like Jehovah he is simply the "I am that I am." But he is essentially and incessantly creative, and his creative activity, like that of the Platonic divine workman in the *Timaeus*, springs from the desire to bring into being every possible form and degree of goodness.

**The Mediating and Creative Logos.** However, as in the Neo-Pythagorean systems, God is too high and too remote to be directly creative. He needs intermediaries, and to this end he generates "powers," which are not only forms and archetypes, like the Platonic Ideas, but forces, like the Stoic *logoi spermatikoi*, that create the universe in their own image.

The two fundamental *logoi* are God's goodness and potency, which, taken together constitute the *Logos*, or all-creating Form and Force by which the world is made and after which it is patterned. On the relation of the *Logos* to God Philo is not clear. At times, he seems to regard it as a being separate from the godhead and describes it variously in personal terms as the mediator, the vice-regent, the messenger, the high priest, the archangel, and the first-begotten of God. Again, it is described less personally as the image, the shadow, and the dwelling place of the Most High, and yet again as an attribute or manifestation of the divine nature, having no independent existence of its own.

There is a similar obscurity in Philo's views regarding the relation of the lesser *logoi* to the *Logos* and to God. Sometimes, they are spoken

of as the servants and messengers and instruments of deity, mediating between God and the world; sometimes as simply the ideas and activities of the divine mind.

Mediation between God and man does not, however, stop with the *Logos* and the lesser *logoi*. The heavens are full of spirits or angels derived from the *Logos* who help carry on the government of the world. Some of them inhabit the stars and direct their courses; some, living in the lower atmosphere, are caught by the attraction of earth and sense, become incarnate in human bodies, and are made man. Every human soul is, then, a portion of the divine breath and spirit, an image and part of the divine mind, a power of God, estranged for the time being from its source by imprisonment in the body and the senses.

**Matter a Cause of Evil.** The physical and sensible world in which the human spirit is caught is in no way derived from the divine substance. It is, to be sure, created by God, but it is created by him out of a stuff which he finds already there, and for whose existence and whose character he is in no wise responsible. He has to accept it for what it is, and make the best he can of it. This stuff is Matter, which stands in eternal opposition to God and forever thwarts the plan and purpose of the *Logos*. It is to the inferior and intractable nature of Matter that all the shortcomings of the universe are due. It stands to reason, Philo thinks, that God, being good, can be the author of good only, and hence cannot account for the inertia, the conflict, the imperfection, and the evil which vitiate the material and sensible world.

Though Matter is co-eternal with God, the universe itself has a beginning, as Plato taught. It is not eternal, as Aristotle maintained. But its beginning is not a beginning in time, since time itself was created, again as Plato taught, when the world was formed.

In describing the nature of Matter, Philo vacillates somewhat inconsistently between Plato and the Stoics. Following Plato, he speaks of it as uncreated, formless, passive, chaotic, Not-Being pure and simple. It is wholly negative—a principle of privation. At the same time, like Plato, he finds it difficult not to regard Matter as a stuffing of some sort which gives spatial dimensions and solidity to corporeal things. Plato had dealt with the inconsistency, we may remember, by identifying Matter with empty space, but Philo is inclined, like the Stoics, to endow it with positive and substantial properties.

**Free-Will and Sin.** In any case, however, Philo is convinced that sin consists in the misuse of free-will. This misuse arises from listening to the solicitations of our lower nature which is bound up with the

senses and the body and thus eventually with the material principle. The body Philo belabors in vigorous dualistic fashion. It is a loathsome dungeon, a corpse, a tomb, a grave, in which our higher nature lies imprisoned and dead, cut off from communion with the divine. We are, then, all infected with a kind of "original sin," by the very fact that we possess a body. Nay more, our possession of a body is due, as we have already seen, to a sinful tendency to dally with the flesh and the senses, which is somehow present in those disembodied spirits who inhabit the heavens nearest to the earth. But it is through an act of free-will that the spirit gives way to this tendency and becomes incarnate. Hence we enter the world already besmirched with an inclination to evil. To be sure, this extreme dualism is modified by the admission that the senses, and even the pleasures of the senses, are not necessarily evil in themselves, provided that they are controlled by our higher nature and dominated by reason. But even so, our higher nature, derived as it is from the divine, cannot fulfill itself as long as we lie captive in the body, and we can attain final redemption and happiness only by an eventual escape from its clutches.

**Ethics.** To effect this escape is the goal of the moral life. Hence the inner, contemplative life of withdrawing our interests from the world and fixing them through meditation and communion upon God is the way of salvation. In following it lie religion pure and undefiled, true wisdom, and true philosophy. But, though we should not be of the world, we are perforce in it, and, being in it, we are forced to have commerce with it. In dealing with it we should follow in the footsteps of the Stoics, shouldering cheerfully the burdens, social and political, life lays upon us, making the inevitable concessions to our physical environment and to our physical needs, practicing love and charity towards our fellow-men; but at the same time maintaining our inner life in independence of external circumstances, unspotted, untouched, and unshaken by our contact with outer things. For all other things are as nothing compared with the knowledge and the love of God.

**The Vision of God.** So, too, with our intellectual life and interests. Scientific pursuits and logical thinking have indeed their place, but they are incapable of reaching truth, and are at the best preparatory steps towards the self-examination and the moral discipline through which the soul makes herself ready to receive the divine illumination. The final vision of God, in which alone the soul can find peace, is, like God himself, ineffable and indescribable. It is a state of mystical

ecstasy, transcending the utmost reaches of even our highest and most abstract thought.

Philo seems to have had no disciples of any note, and no direct influence, at any rate, upon the century and a half that intervenes between his death and the birth of Plotinus. Philosophic speculation was carried on and forward by the later Neo-Pythagoreans, with whom we have already dealt.

## *Chapter XXI*

# PLOTINUS

### I. NEO-PLATONISM

We come now to a movement that is distinctly and consciously Platonic and Aristotelian in its inspiration, and that considers itself the reconciler of these two philosophies and the exponent of their true meaning. This movement is Neo-Platonism. Its originator seems to have been Ammonius Saccas, who taught at Alexandria in the first half of the third century A.D.

**Contemporary History.** The epoch in which he and his great pupil, Plotinus, lived was one of impending chaos, political, social, moral and religious, throughout the Roman world. To the north and east loomed the ever blacker and more rumbling storm clouds of the barbarian invasions. Within the Empire, upon which the last rays of the setting sun of ancient grandeur still lay, there reigned a spirit of political fatigue and lassitude, born of the countless wars and revolutions by which so much of the best blood of Rome had been slowly but surely drained. The government was maintained by a rapid succession of Emperors, some good, most bad or indifferent, who owed their rise and their fall to the intrigues and the support of the army. The Antonines had descended not only to the dust but to the dirt under the infamous Commodus, the son of Marcus Aurelius, murdered in 192. The next year, after two Caesars had been elevated and cast down by the soldiery, there came to the throne Septimus Severus, who administered the Empire with ability for eighteen years, and succeeded in dying in his bed. But his son Caracalla proved equal in infamy to Commodus, and after a short reign yielded by assassination to the amazing Emperor Elagabalus, than whom no youth probably has ever packed the years between fourteen and eighteen with more varied and intense dissipation. Elagabalus' cousin and adopted heir, Severus Alexander, proved, however, an excellent ruler, whose very virtues, after a brief reign of three years, proved his undoing. Between him and the accession of Aurelian, in 270—the year, incidentally, in which Plotinus died—ten emperors of small account came and went.

It was a kind of pernicious anemia, with its characteristic brief periods of remission, of which the body politic was dying. The end was not far off. The brief convulsions that preceded the dissolution of the Empire were beginning. Another sixty years and the division between the West and the East had occurred; another hundred, and Rome had been abandoned as the imperial residence for Ravenna on the one hand, Constantinople on the other.

**Social Conditions.** With the decay of political vigor went a decline of social and individual morals. The old-time virtues of the Romans had faded. Severity and self-discipline were a thing of the past. Their martial ardor was no more. Their native coarseness and brutality had turned effeminate. Criminal law had become more and more barbarous. The "third degree" was universal in the examination of the accused, and even free men were put to the torture. Burning at the stake was the common method of execution.

The wealth of the Empire had become concentrated in the hands of the great landowners—absentee landlords for the most part, who paid little or no attention to their estates, which were farmed by slave labor. The senatorial clan, forbidden to govern, to engage in business, or even to enter military service, became either dilettante or out-and-out soft, luxurious, and over-sensual. The populace had long since been debauched by the dole of free food and free amusement—*panem et circenses*. The population had been decimated by disease and a falling birth-rate, and the native stock had been largely replaced by immigrants of Teutonic and Semitic origin.

**Cultural Decay.** The realms of thought suffered no less severely. Latin literature had come to an end with Apuleius, and the revival of Greek in the second century, which found its most distinguished exponents in Plutarch and Lucian, was artificial and brief. Art was second rate and imitative, though there were still good portrait painters, architects, and engineers. The old theology, too, was by this time thoroughly decadent, and people had turned from it to the Oriental mystery-religions, whose rise we have already noted, and which were now in the heyday of their popularity. There was no longer any attempt to suppress them. The Christians and the Jews alone were persecuted, and they not on religious grounds, but because their conscience forbade them to take part in religious rites equivalent to saluting the flag and taking the prescribed oath of allegiance to the state.

**Ammonius Saccas.** Of Ammonius and his teachings we know next to nothing. He was born a Christian but was later converted to the Hellenic faith. He was highly respected both as a man and a teacher



at Alexandria, and was held in great veneration by his pupils, who attributed to him almost supernatural insight, and especially by Plotinus, who could not too strongly insist on the debt he owed him. He was credited also with being the first philosopher to undertake a systematic reconciliation of Plato and Aristotle.

**Longinus.** Ammonius had a number of famous pupils besides Plotinus. There were the two Origenes, one of whom later became a famous early Christian philosopher. There was Longinus, best known to us not as a philosopher, but as the reputed though not the probable author of the essay on impressiveness in literary style which figures in English as the *Treatise on the Sublime*. Longinus also wrote commentaries on the *Phaedo* and the first part of the *Timaeus*, and was familiar with and critical of the works of Plotinus. Like Ammonius, he attacked the Stoic view that the soul is a material thing, and he seems also to have been concerned with the relation of the Platonic Ideas to the Demiurge. Did the Ideas exist independent of and prior to the Demiurge, or were they simply thoughts of the Demiurge existing in his mind? Plotinus, as we shall see in a moment, made them the thoughts of the divine mind, but Longinus insisted that they existed independent and outside of the creative intellect, as the models or patterns to which it looked in its work of fashioning the world.

## II. PLOTINUS

But, just as Aristotle overtopped so tremendously all the other pupils of Plato, so the disciples of Ammonius, the reviver of Plato, were all overtopped by Plotinus, by some critics regarded as an even greater metaphysician than Plato and Aristotle themselves.

**Life.** The first thirty years of Plotinus' life are almost blank. It is believed that he was born in Lycopolis about 204 A.D., of stock that had earlier emigrated to Egypt from Rome. At the age of twenty-eight, however, he appears at Alexandria as a pupil of Ammonius, with whom he remained for eleven years. At his master's death, eager to acquaint himself at first hand with the wisdom of the East, he attached himself to a military expedition which the Emperor Gordian was leading against the Persians. The campaign, however, came to an untimely end. It had scarcely reached the Euphrates when Gordian was murdered by his generals, and in the confusion that ensued Plotinus, barely escaping with his life, had to flee to Antioch.

The next year, 244 A.D., he betook himself to Rome, where his success was immediate. He quickly gathered about himself a band of

eminent disciples, which came eventually to include the Emperor Gallienus and the Empress Salonina. His influence with the imperial couple was great. They granted him land on which to establish a city incorporating the principles of Plato's *Republic*—a scheme that fell through because of the intrigues of his enemies at court—and it has been suggested that Gallienus' toleration of the Christians and personal guarantee of protection were due to Plotinus' intercession on their behalf. Not that Plotinus had any love for the Christians. He never mentions them directly in his writings, and in what seems to be an indirect reference to them he passes them by with disdain. Against the Gnostics, parts of whose fantastic speculations had a Christian background, he is outspoken in his condemnation.

**Religious Mysticism.** By nature Plotinus was a religious mystic of the first order. Indeed, his pupil and biographer, Porphyry, tells us that four times in a state of ecstasy he was made one with God. He is also said to have been ashamed that he had a body, and to have considered his parentage and birthplace of so little importance that he never would speak of them. But this mysticism and piety were tempered by a justness and sanity of vision and an intellectual balance that made him dislike all forms of religious or philosophical vagary and excess. In his scheme of salvation there was no dodging the discipline of clear and exact thinking. Reasoning, to be sure, could not get you all the way to God. In the end he had to be directly felt. But the mind was not ready for the final "ecstasy" of immediate union with him till the discipline of close and reasoned thinking had been carried to its finish. Again, in spite of his piety, Plotinus would never affiliate himself with any of the organized worships. "The gods," he said, "must come to me, not I to them." Their dwelling was not in temples but in the human heart.

The last years of his life he suffered from a fatal illness which forced him to abandon his teaching and retire to the home of a friend at Minturnae, not far from Rome. There he died in the year 270 A.D., at the age of sixty-six.

**The Enneads.** It was not until he was fifty that he could be induced to put his thoughts down in writing. Hitherto all his teaching had been oral. His lectures, we are told, were clear and brilliant and held his audiences spellbound. But he had no love for writing and slapped his ideas down as they occurred to him, often obscurely and ungrammatically, with no effort at style. Moreover, his eyesight was so bad that he could not himself revise and correct what he had written, and his handwriting was so illegible that no one else could succeed at the

task. His pupil Porphyry collected all these disconnected jottings, shook them down, and published them, not in the order in which they were written, but divided somewhat arbitrarily into six parts, each one of which contained nine monographs or books. The material in each book was to some extent shaken down and organized. From the division into nine comes the name *Enneads* by which the collected works of Plotinus are known.

### III. THE PLOTINIAN REALITY

In interpreting Plato's doctrine Plotinus could not hope to escape the color and the distortion of his own temperament and the atmosphere of the times. Naturally he seized upon the religious and the mystical elements in the Platonic teaching, upon the allegories and myths, which Plato apparently did not mean his readers to take literally, and in general upon the most imaginative and pictorial and the least scientific aspects of the Platonic philosophy. The presentation of the Idea of the Good in the likeness of the sun shedding being and life throughout the universe; the theological drama of creation in the *Timaeus*, which portrays a cosmic workman fashioning Matter into a world in the image of a divine archetype or model; the doctrine of the fall and the reincarnation of the soul and of her possible release from the wheel of birth and rebirth and mystical reunion with her divine source; the opposition of the spirit to the flesh and its salvation by flight from the world to a higher sphere—these were the things that fascinated him most and that gave him his cue.

**Adoption of the Eleatic-Platonic Standard of Reality.** Again, the standard of Reality that Plato took from the Eleatics, Plotinus in his turn took from Plato. Only that can really *be*, in the fullest sense of the word, which is uncreated, indestructible, unchangeable, motionless, indivisible and therefore unextended, simple in quality, single in essence, without taint of variety, multiplicity, and alteration.

Applying this standard, he rejects, one by one, Matter, Soul, Mind, and even the Aristotelian Active Reason as suitable candidates for the position of ultimate Reality. The first three are notoriously infected with multiplicity, motion, and change, and even the Active Reason as conceived by Aristotle, is still the contemplation of a truth that is complex and that is the object of a contemplating subject. Hence it lacks the indivisibility and the unity that the ultimately Real must possess.

Reality, therefore, must lie beyond even the confines of the intelligible world—the world of Platonic Ideas—and slip through the fingers of reason at each effort our minds make to grasp it. Plato himself, Plotinus might feel, had hinted at this when he elevated the Idea of the Good above the system of Forms which constituted the intelligible structure of the universe, and had asserted that it was indescribable even in such ultimate terms as existence and essence. However that may be, Plotinus insists that the nature of the Real is unutterable in any of the categories of our finite experience, even though they be most high, like beauty, or goodness, or mind, or being. The Real is higher than all these things and is not to be described by their names. It is attainable only in a state of mystical ecstasy from which the last trace of sensible and intelligible experience has been erased. In that state there is no longer any multiplicity or division of any sort. The complexity of the truth contemplated by pure reason is dissolved, the distinction between thinking and being thought about is overcome, the difference between subject and object disappears, subject and object are one, and that One is absolute unity, simple, indivisible, homogeneous, unalterable, uncreated, indestructible, in which there is no shadow of multiplicity or variety or turning. Here at last we have something that measures up to the Eleatic and Platonic specifications of the Real.

#### IV. EMANATION

Having thus by analysis and rejection located the ground of all being in this ineffable One, inexpressible in any of the terms at the command of a finite being, but nevertheless accessible in rare moments of mystical ecstasy, Plotinus turns to the problem of deriving the universe from its source.<sup>1</sup>

To solve this problem Plotinus turns back once more to Plato. In the *Timaeus* he had read that God was good and that the good can never have any jealousy of anything, but rather desired that all things should be as like itself as possible. And in the *Republic* there were the passages, to which we have already referred, in which the Idea of the Good is portrayed as giving being and intelligibility to the world of Ideas even as the sun by its light turns the darkness by night into a landscape by day to which it gives visibility and being.

Here was the answer plain at hand. The One, like the Good, must spend itself, must pour from itself its essence till every possible form

<sup>1</sup> The account, in the next paragraphs, of the Divine Reason and the World-Soul, and of their derivation from the One is found in IV, 8; V, 1, 2, 3, 4, 9.

and degree of existence was actualized. Just, then, as light pours from the sun, so being emanates from the One. But the moment that the effulgence of being has separated itself from its source it becomes other than, different from, and less than the One. This separation gives rise to an act of what Plotinus calls "epistrophe" or turning back and yearning toward its source. By this act the light becomes aware that it has left the sun and is no longer one with it. Thus the distinction between subject and object is brought into being. Moreover, it also becomes aware of the nature of its separated self, which, since it is no longer the One, is multiple in nature, yet multiple in the way that most closely approaches absolute unity.

#### V. THE DIVINE INTELLECT

**Union of the Intellect with the Intelligible.** But what is the nearest approach of the many to pure unity? When is the distinction between subject and object only just drawn and ever on the point of being erased? The answer to these questions is found in the contemplative activity of pure reason. The nature of thought is essentially a striving toward unity, a search for the pure and undivided One, and it achieves the closest approach to pure unity that can be attained short of mystical ecstasy. It reduces all the variety and multiplicity of the universe to a single, interconnected, unified system of types and laws, over which it hovers and broods in self-sustained and motionless meditation, beholding and apprehending at a single glance the plan of all time and existence given in its entirety. It sees, then, the world-process not as a temporal succession of events, but under the aspect of eternity. Its act of knowing the truth knows once and for all everything that there is to know about the past, the present, and the future. It, like the truth upon which it meditates, is timeless.

Further than this, however, the activity of contemplative reason cannot soar. It reaches its "ceiling" in possessing and being the answer, good in all times and places, to all the questions that have and do and will beset all minds intent on discovering the truth about the world.

Not until Reason has emanated from the One have we anything of which we can say "it exists" or "it is." The One itself no more exists than it thinks or can be thought of. Such terms belittle its supreme majesty, which is higher than being, and higher than thinking even eternal truth. But existence can be predicated of the Divine Reason and of the rational order of the universe it enshrines. Indeed,

the activity of contemplative reason and the immaterial Forms and Laws with which it occupies itself alone measure up to the specifications laid down by Plato and Aristotle for real existence. Real existence, then, and the intelligible structure of the universe are identical.

**Ideas of Particulars.** In expatiating upon the content and lay-out of the divine mind, Plotinus follows closely Plato's enumeration of the different sorts of Ideas. But in one important respect he parts company with both Plato and Aristotle. They, it will be remembered, had said that all Ideas and Forms are general or universal in character. The particular objects exemplifying the Ideas are incomplete and multiple representations of them by the material principle, whose nature it is to refract the universal and to display it broken up into a myriad instances of itself. Plotinus, however, maintains that there are Ideas or Forms of particular men, as well as an Idea of mankind in general laid up in the divine mind. Our separate personalities are recognized and registered in the formal structure of the universe. So, too, as thinkers, our individual reasons are eternally separate parts of the Divine Reason.

## VI. THE WORLD-SOUL

**Emanation of the World-Soul from the Divine Intellect.** Now, the universe is obviously more than a system of eternal Forms enshrined in a purely contemplative reason. It is a moving, living flow of many concrete, sensible phenomena, to which the Forms give structure and order. The Forms that contemplative reason thinks, are, as the Stoics would say, *logoi spermatikoi*, seminal forms, which also create, as nearly as possible in their own image, a further generation of being. Just, then, as the One overflowed, so now Reason in its turn overflows. And just as the light pouring out of the One looked back to its source and, recognizing its departure and difference from the One, became the nearest possible thing to the One, so the light emanated by contemplative Reason turns back in a similar "epistrophe" and, seeing that it is no longer Reason, becomes the nearest possible thing to contemplative Reason, which is Soul. So, too, the essence of Soul is a striving after that contemplative possession of truth which is the prerogative of the Divine Reason. But, once more, she could not attain her goal without being reabsorbed into the Divine Reason and ceasing to be herself. Her "ceiling" is reached in so-called discursive or synthetic thinking, which wrestles with problems, and puzzles and argues and reasons things out, and by so doing brings us to the moment, and

leaves us at the moment, when the solution suddenly reveals itself to us and the truth is self-evident. Then the activity of contemplative Reason takes her place. Furthermore, and here Plotinus adopts the Platonic and the Aristotelian triple division of the soul, she possesses two other powers or capacities. She is the principle of sensation which man shares with the animals, and the giver of life and of the vital functions which both man and animals share with plants. The sensitive soul may be regarded as a sort of minor and internal overflow of the rational soul, and the vegetative soul as a similar emanation from the sensitive.

**The Generation of Time.** With the appearance of Soul, a new and important element comes upon the scene. In the generation of Reason from the One, and of Soul from Reason, there is no question of temporal succession. The three are co-eternal. But the operations of Soul take place in *time*. She thinks of one thing *after* another, she perceives one event *after* another, the vital functions she sustains *go on*. Time, says Plotinus, occupies the same relation to soul as does eternity to Reason. Whereas the activity of contemplative Reason is eternal, the activities of Soul are everlasting. Time, as Plato said, is the moving image of eternity. Time, however, cannot be abstracted from motion, and set up as a measure of motion, as Aristotle had maintained. It is, rather, inseparable from the synthetic and discursive or "running through" activity of the soul—of her having to pass from one thing to another instead of grasping all things at once. If the soul should succeed in identifying herself with contemplative Reason and in seeing all things together, then time would cease.

**The Emanation of Individual Souls.** The emanation of Soul from the Divine Reason takes place both in a general and particular manner. Just as the Divine Reason emerges from the One as a single, unified system of the many Forms that constitute the intelligible structure of the universe, so Soul emerges from Reason as a single, all-comprehending, all-unifying World-Soul containing within itself the particular souls of individual beings. Like Reason, it is a one-in-many.

Plotinus lays equal stress upon the unity of the World-Soul and the multiplicity and variety of individual souls. Individual souls must be separate and distinct, else we should all experience one another's sensations, desires, thoughts, and the like, and for that matter everything that occurred anywhere in the universe. On the other hand, all particular souls are interrelated, and all partake of the nature of Soul in general. They are then not only many, but one. But how can this be? How can individual souls proceed from the World-Soul, or be parts

of it, without diminishing or dividing its nature? This difficulty disappears, Plotinus thinks, if we will think of derivation or division not in a material but in a logical sense. Take, for example, a science. The notions that spring from it do so without altering or impairing its nature, and involve one another without losing their distinctive character. After the same fashion all particular souls can be interrelated, and can be contained within and derived from the World-Soul without impairing its essential unity and without losing their separate individualities.

#### VII. IMMORTALITY

The immortality of the individual soul is argued at great length.<sup>2</sup> Plotinus attacks in succession the materialistic doctrine that the soul can be reduced to physical atoms or their motions; the Pythagorean teaching that she is a harmony of the body; and the Aristotelian contention that she is the entelechy or actualization of potentialities inherent in living organisms. Matter of itself cannot be conceived as producing vital and conscious activities. The body can no more produce harmony by itself than the lyre can play itself. Nor could Aristotle locate the higher or even the lower activities of the soul anywhere in the physical organism.

The truth is that the soul is an incorporeal essence, the source and the substance of life and motion. Nothing can stop her going on forever, except possible reabsorption into the timeless and the eternal. All human souls are everlasting expressions of the eternal *logoi spermatikoi* of individual men. Not only, however, is the rational part of our soul immortal, but also the sensitive and the vegetative parts, which are portions of the sensitive and vegetative powers of the world-soul, and at death return to their source.

**Reincarnation.** Being everlasting, our souls must exist before birth as well as after death. Following the lead given by Plato in the *Phaedrus*, Plotinus tells us that the heavens are full of souls, possessed not only of reason but of the sensitive and vegetative faculties, and dominated, as the case may be, by one or another of these three powers. When these souls fall into the body and become incarnate, the propensities of the individual they inhabit are determined by their dominant characters. The process of reincarnation is directed in the same way. Those who have abandoned themselves to their passions and lived on the level of sense become wild and lustful animals; the stupid, who have merely "vegetated" all their lives, become plants. Esthetes,

<sup>2</sup> On immortality and reincarnation, cf. III, 2, 3; IV, 4, 8.



he tells us, are reincarnated as song-birds, good tyrants turn into eagles, unsuccessful social reformers into busy bees, and absent-minded philosophers into soaring birds. Good all-round men become men again. Furthermore, things are so arranged that those who have done wrong to others are in their next life wronged in the same way. Malefactors of great wealth are reborn in poverty, and murderers are murdered.

But reincarnation for Plotinus is only episodic—like passing, he says, from dream to dream or sleeping each night in a new bed. How far he intends his descriptions to be taken literally it is hard to say. In any case, they are full of discrepancies, and are not worked together into anything like a systematic doctrine of immortality. The reason perhaps is not far to seek. To Plotinus as to Plato the *immortality* of the soul, in the usual sense of everlastingness, meant simply endless imprisonment in time, varied only by a shift from cell to cell. It was not something to be desired but something from which the soul should make every effort to escape. She must break her bars, awake from her dreaming, and stay awake without thought or desire of going back to bed. She must put off everlastingness and put on eternity. But to this point—the manner of the soul's redemption—we shall return anon.

#### VIII. THE PLOTINIAN TRINITY

So far, then, we have three divine principles. First we have the ineffable One, the source of all being, but itself above and beyond being, and indescribable in any term or category of human experience. Second, we have the Divine Intellect generated by and emanating from the One, as light is generated by the sun and proceeds from it. This principle enshrines, and contemplates, and is one with, the Form and intelligible structure of the existent. And finally we have the World-Soul which in its turn proceeds from the Divine Intellect and enacts and gives multiple and particular spatial and temporal expression to the content of the Divine Mind. Applying Plotinus' own metaphor, as embroidered by Dante, to the scene, we may envisage it as a central flame of intolerable light, which even the eye of reason cannot bear to look upon, surrounded by concentric, circular rainbows, the one at rest, the other revolving, aglow with the many, varied colors of the spectrum of existence and thought and sense and life. These three principles constitute the Plotinian trinity.

## IX. THE PHYSICAL UNIVERSE

We pass now from the realm of pure spirit to the corporeal world of physical bodies spread out and in motion in space, and coming into and passing out of being in time, whose occurrence and movement are subjected to a law of mechanical cause and effect. Why, we ask, should such a universe exist, and how does it come to pass?<sup>3</sup>

The answer is that the generation of the physical universe is incidental to the same process of emanation as necessitates the generation of the World-Soul by the Divine Intellect, and of the Divine Intellect by the One. With the generation of the World-Soul the process of emanation has by no means exhausted itself or come to a logical conclusion, since there remain vast realms of unrealized possibilities of lower forms of being waiting to be actualized. Hence the World-Soul must overflow just as the One and the Divine Intellect overflow, and the further outpouring and extension of divinity is the physical universe. We should note incidentally that here Plotinus breaks with Plato, who regarded the universe as the handiwork of a creator, and with Aristotle, who regarded it as uncaused.

But if we look more deeply beneath the act of generation to its results, the picture changes. Now there is not merely difference in the divine light, there is diminution of it. There is a creeping shadow and a gathering dimness. The white light of the One is not merely split into many colors. It is beginning to *fade*. For the physical universe is corporeal and spatial. In a word, it is *material*, and the incipient twilight means the transition from a spiritual to a material world. Still, even so the universe, taken as a whole is a perfect body and represents the closest approach that light which has begun to fade can make to light in which as yet no shadow has occurred. The flawless constitution and frictionless running of the cosmos are a kind of "epistrophe" towards its source and mark the "ceiling" to which body may attain, but beyond which it cannot pass without ceasing to be body and returning to the spirit from which it came. Such lessening, then, of the divine light as occurs in the lapse from pure spirit to a physical order is not necessarily ominous.

When, however, we turn from the universe as a whole to an inspection of its parts, darkness suddenly looms as darkness and not simply as diminished light. The operations of the universe involve the birth

<sup>3</sup> For the generation of the universe by the World-Soul, and of individual bodies by individual souls, cf. IV, 8; V, 1, 2, 4, 9.

and death, the conflict, and the collision of its parts and their destruction by one another—a situation that brings suffering to sentient beings, and defeat and despair to beings also conscious of their aims and hopes and possibilities. Then, too, the generation of the individual body by the individual soul is attended with labor and pain, and only too often enslaves her to bodily desires and makes her the servant rather than the master of that which she has created. In short, her “descent” becomes a “fall,” and sin enters the world.

#### X. THE PROBLEM OF EVIL

Plotinus now had on his hands the problem of evil. He had to explain the sudden change the process of emanation took for the worse after generating the physical universe, and to reconcile the imperfections of the world with the perfection of its source. And, so far as human beings were concerned, he had to justify the misfortunes and sufferings that befell the best of them and the prosperity frequently enjoyed by the wicked. Moreover, he had, above all, to explain moral evil, and to show how souls outpoured from the divine and themselves parts of the divine World-Soul could and did sin.

In dealing with the problem of physical evil he employed, first of all, most of the Stoic devices, with which we are already familiar and which we need not repeat. The gist of his contention, as of theirs, was that suffering and misfortune are not evil for the good man and that for the sinner they are a just punishment and therefore good. In developing the latter point he had at his command the idea of individual immortality and reincarnation, which for the most part the Stoics lacked. Where suffering, he tells us, cannot be referred to sin committed here and now, it may be regarded as the fruit of evil deeds done in past existences. The moral order is, if anything, to be praised for the economy and ingenuity it displays in so arranging things that the victims of crime in this life were always former criminals in past existences, and that they are being done by precisely as they did. Thus evil-doing is impressed into the service of the moral government of the world, and is always turned to a good purpose, without, however, making the deed by which justice is done any the less criminal, and the agent of the divine justice any the less wicked and deserving of punishment in a future reincarnation.

The dramatic propriety of setting a thief to catch a thief is used by Plotinus also to justify evil in general. The sinner is like the villain in the play. For the want of him the cosmic drama would be the poorer.

Sin and suffering are like the shadows in the picture for the presence of which it is a finer work of art. Nay more, just as the shadows bring out the lights, so evil by its contrast enhances the good. Or again, good and evil are like the different and opposed tones which when combined produce a musical harmony. The harsher notes, and, for that matter, even the discords contribute to the perfection of the composition, and any instrument is better according as it produces the greatest variety of sounds.

We must not think, however, that providence deliberately generates sin and suffering for the express purpose of producing these artistic effects. Evil is simply utilized by divine providence when and where it happens in the course of events.

#### XI. FREE-WILL AND MORAL RESPONSIBILITY

**The Soul a Free Agent.** These arguments, however, could not explain why the individual soul went wrong, and how she could be justly held to account for her wrong-doing. The nature of sin, to be sure, lay, in Plotinus' opinion, in an "audacious" impulse conceived by the soul, after she had generated the body and entered into it, to free herself from the restraints laid upon her as part of the World-Soul, and to go her own way—a way that followed the solicitations of the body and of the physical universe. Thus a conflict arose within her between a lower nature expressive of these solicitations and a higher nature shared with the World-Soul and derived from her *logos spermatikos* in the Divine Intellect.

But where does this "audacious" inclination come from? And is the soul compelled to follow it, or is it within her power to resist it? These questions bring Plotinus face to face with the problem of free-will and moral responsibility. That the soul is a free agent, and that she, and she alone, is to blame for her fall, Plotinus cannot emphasize too strongly. However, to establish this fact, he feels that we must first define what we mean by freedom and then see if the soul can successfully exercise it.

**The Process of Emanation.** The nature of freedom can best be illustrated by reviewing the process of emanation. The emanation of the existent from the One is, Plotinus insists, a free act on the part of the One. Yet it is an act in which there is no exercise of will or choice, since the One is above choice and volition. Moreover, it is an act to which there is no possible alternative. The One *must* overflow, because it is its nature to do so, and it cannot abstain from being itself. The

freedom, then, of the first act of emanation does not depend upon or imply an ability on the part of the free agent either to act otherwise or to refrain from action. It lies simply in the fact that the One is not compelled to overflow by anything outside itself, but only by its own nature. The freedom of the One, in short, is not a "free-will of indifference" but a freedom of self-determination.

So, too, the Divine Intellect is forced by itself alone to generate the World-Soul, and the World-Soul by herself alone to generate the physical universe. No alternative to emanation, no other course to choose, is open to them. But since their acts are determined by themselves and not performed under external compulsion, they, too, are free agents.

The freedom of the individual soul is of the same sort. She *must* generate the individual body and descend into it, because it is her nature to do so. No outer force either compels or opposes her act. The emanation of the body to which she is forced by her nature is at the same time a completely free expression of herself. Indeed, if she did not radiate a body and descend into it, her creative power would remain unmanifested and without fruit, to the curtailment of her own inner goodness and power, and to the impairment of her freedom.

**The Soul Determined by Her Character.** That her freedom also is not freedom of indeterminism but of self-determination Plotinus makes clear beyond any possible misunderstanding. Our choices and our acts, he insists, must always have a sufficient reason by which they are determined to be what they are. . . . "Causelessness is quite inadmissible; we can make no place here for unwarranted 'slantings,' sudden movements of bodies apart from any initiating power" (such as the Epicureans invoked as a basis of freedom), "for precipitate spurts in a soul with nothing to drive it into a new course of action. Such causelessness would bind the soul under an even sterner compulsion, no longer master of itself, but at the mercy of movements apart from will and cause. . . . On the assumption that all happens by cause, it is easy to discover the determinants of any particular act or state, and to trace it plainly to them."<sup>4</sup>

In the case of the soul, the determinants of her particular acts or states are to be found in her *character*. This character is composite. It consists of a central core, which proceeds from the particular form or *logos* of the individual soul laid up in the Divine Reason,<sup>5</sup> and of incidental accretions acquired during the process of reincarnation. The

<sup>4</sup> III, 1, § 1 (trans. Mackenna).

<sup>5</sup> Cf. V, 7; III, 3, § 3 ff.

soul has made herself what she is by the kind of life she has led in her past existences. The character she has thus built up may predispose her to vice. The wicked are wicked because it has become their nature to be wicked. Nevertheless the soul is essentially disposed to the good. She cannot deliberately and of herself *will* evil. When her choices and acts are determined by her essential nature and carried out in accordance with it, they are *free* acts. She is, to be sure, responsible also for the acts to which her acquired character may lead. But her responsibility for them rests upon the fact that, in Plotinus' opinion, she need not have acquired the character of which the deeds in question are the necessary outcome.<sup>6</sup>

We have now seen that the soul possesses a free will not of indeterminism but of self-determination, that her choices are expressions of her character, that her character is essentially self-determined to the good, and that her vicious tendencies and behavior are somehow acquired by her after she has generated and descended into the body. But we are as far as ever from explaining how the soul can sin. For how can a blameless character, self-determined to the good, acquire vicious tendencies and go wrong and fall into evil ways?

**The Incarnate Soul Influenced by the Body.** A possible answer suggests itself at this point. When the soul has descended into the body she is no longer without alternative courses of action open to her, and is no longer determined by herself alone. On the contrary, she is now attached to an individual body of her own with its passions and pleasures, and she is surrounded by a multiple, complex physical world which presses upon her from all sides, offers innumerable choices between alternative courses of behavior, and incites her to behave in all sorts of ways. In these circumstances her choices are dictated, in part at least, by the nature of the external situation by which she is confronted, and her actions are reactions whose nature is determined both by her own character and that of the external stimulus. In short, her behavior is now the result of a component of forces of which she herself is but one.

Is it not possible, then, that under such conditions her power of determining her conduct should be largely or completely blocked by a superior strength of external forces? May not these forces prevail over the force she contributes to the component? Must she not be carried at times helplessly in the stream of physical impulses and events? Nay more, if these events and impulses are themselves all

<sup>6</sup> Cf. IV, 8, §§ 3, 9; I, 8, § 4; III, 2, § 10.

providentially ordered, is not the fact that she succumbs to them also part of the divine order, and therefore something for which she is not responsible, and, for that matter, something that is not evil but good?

**Self-Determination Possible.** Plotinus, however, will not listen to such an excuse. The soul is emphatically *not* enslaved to external circumstance by her descent into the body. Nothing—call it fate, destiny, or divine providence—can deprive her of her power of self-determination. She may, indeed, choose to act in accordance with providence, but action in accordance with providence is not necessarily action to which the soul is determined by providence. “The act of the libertine is not done by providence or in accordance with providence; neither is the action of the good done by providence—it is done by the man—but it is done in accordance with providence.”<sup>7</sup>

Furthermore, we must not forget that the soul is always a factor in the component of forces that determines each of her reactions to the physical world, and hence that her behavior must be at least partly determined by herself. And what she contributes is, in Plotinus’ opinion, always the dominating factor in the reaction. Therefore, no combination of external forces, however strong, can take from her the power to control her behavior in any situation. She cannot be forced to sin by the incentives that beset her. When she sins, she and she alone is to blame.<sup>8</sup>

The freedom of self-determination of which nothing can deprive the soul, Plotinus, like the Stoics, considers a sufficient basis for moral and legal responsibility. We do not need to ask whether a man, being what he was and confronted with a situation such as faced him, could have acted otherwise. If he did at the moment what he wanted to do and in acting felt himself under no compulsion save that of his own nature, he can be held to account, legally and morally, for what he did, and can be justly punished for his criminal act.<sup>9</sup>

But the question of how the soul can sin still remains wide-open. She is self-determined to the good, and is the dominating factor in all her reactions. By rights, then, it would seem that she ought to exercise her freedom by withstanding her “audacious” inclination to cut loose from the World-Soul and yield herself to the body, and by resisting the temptations to which contact with the sensible world exposes her.

<sup>7</sup> III, 3, § 5 (trans. Mackenna).

<sup>9</sup> Cf. III, 2, § 10.

<sup>8</sup> Cf. IV, 3.

## XII. MATTER

There remains, however, one further possible explanation of the soul's misuse of her freedom and her consequent fall into sin, that we have not yet explored. Even if she possesses an inalienable sovereignty over herself, and a power to withstand the temptations of the world and the flesh, the fact remains that it is only after she has generated and descended into the body, and has become enmeshed in the material universe, that sin occurs. It looks, then, as if sin must have its source, or at least its occasion, in the material principle.<sup>10</sup> Perhaps if we examine the nature of Matter we shall find a solution of our problem.<sup>10</sup>

**The Nature of Matter.** Plotinus begins his inquiry into the nature of Matter by reviewing existing theories, and comes at once to the conclusion that physical matter is only one manifestation of the material principle. This principle is, as Plato taught, one of Not-Being as opposed to Being, and, as Aristotle maintained, one of formless and unrealized Potentiality as opposed to Form and Actuality. It is, as they also thought, the principle to which the multiple, restless, unfinished, unperfected, non-unified aspects of the universe are due. In terms of Plotinus' own central metaphor, Matter is the darkness which mingles with the light emanated by the One, as that light recedes from its source, and which dims its radiance and power and confuses the vision of which it is the vehicle.

The appearance of Matter is necessitated by the very nature of emanation and must occur in the primal act of generation on the part of the One. For emanation and generation mean separation of the generated from its source, and separateness means otherness and difference from the One, which, in its turn, implies deprivation of complete unity and perfection. Matter, then, is already present in the Divine Intellect, which is other than the One and therefore multiple in content, and other than the Perfect and therefore in a sense imperfect. But this "Intelligible Matter," as Plotinus calls it, which differentiates the Divine Intellect from the One and expresses itself as a substratum of general intelligibility in which many Forms participate, is innocuous and without evil in the ordinary sense of the word.

**Matter a Diminution of Being.** However, as the process of emanation continues, the divine light is gradually diffused and spent as it proceeds further and further from the One. In the Divine Intellect and the World-Soul it is broken into many colors and begins to

<sup>10</sup> For Plotinus on matter and its relation to evil, cf. I, 8; II, 4; III, 3.



shimmer, but it has not yet perceptibly begun to fade. But with the emanation of the corporeal universe, diminution appears along with difference. The light is perceptibly dimmer, and darkness begins to manifest itself. And slowly fullness of being wanes, and the twilight of distance from the One waxes, as we pass down the scale of animate creation to the lowest forms of life, and thence through progressively increasing formlessness to the faintly glowing rim of the most elemental formulations of Matter, which flicker on the verge of black night and at last expire into it.

Pure Matter, then, is for Plotinus, as for Aristotle, a negative limit approached but never reached by Being. It is the final darkness to which the dying light of Being gives rise by its extinction. It cannot be penetrated by the eye of either sense or thought. Nevertheless, as Plato found when dealing with the formless space of Not-Being, we can have a spurious or "bastard" concept of it, just as the eye can somehow "see" darkness, which is an absence of light and sight.<sup>11</sup>

### XIII. MATTER AND EVIL

Since Matter is the source and principle of imperfection and evil, what is true of it will, by and large, be true of them. Neither Matter nor evil, as we now see, is a positive principle actively and stubbornly resistant to the good, either in the shape of an intractable world-stuff which God has difficulty in handling, as Plato thought, or of an ill-disposed animated world-stuff such as Numenius believed in. Again, Matter is not a purely neutral substratum for the domination of which God and an evil world-soul are contending, as Plutarch maintained, nor is the source of evil a malignant, quasi-personal power opposed to God, as the Persians and the Gnostics held.

Imperfection and Matter are rather a deforming or "unforming" of Form, as Aristotle believed. But this blurring and smudging of Form is not due, as he thought, to a kind of "drag" in a creative process of converting lower and more potential into higher and more actual Forms of being. On the contrary, says Plotinus, they are incidental to a creative process in which Actuality and Form dwindle away into the lower, less actual, and more formless degrees of existence. Evil in itself, "primal" evil, as Plotinus calls it, in which the degeneration of the Good terminates, is identical with pure Matter and utter darkness.

This curious negative-positive, "absence of light = presence of darkness" character of Matter and evil enables Plotinus to derive them

<sup>11</sup> Cf. I, 8, § 14.

from the One, without thereby making the One their cause. They are neither part of God, as the Stoics supposed, nor do they exist independently of God, as the Neo-Pythagoreans and the Gnostics held. They are derived from the One, just as darkness may be regarded as derived from the fading of light. But they are not caused by the One any more than the derivation of darkness from the fading of light makes light itself, whose nature it is to shine, the cause of darkness. All we can say is that just as the sun must radiate light, so the One must radiate being and goodness if it is not to remain non-creative and unfulfilled.<sup>12</sup> But just as light, once radiated, must fade, so being and goodness, once emanated, must diminish until they are wholly spent—that is, until they lapse into the complete absence of light and goodness and being which is at the same time a complete presence of darkness and evil and nothingness. God, then, being the source of emanation, is in a sense the source of Matter and evil but he is not, in Plotinus' opinion, therefore responsible for them.

#### XIV. THE RELATION OF SIN TO EVIL

Turning now to sin, we note first that it is itself not *the* bad. In the same way, virtue is not *the* good. Both virtue and vice are inclinations or movements, the one towards perfection, the other towards absolute evil. Sin, in Plotinus' own phrase, is "secondary evil," metaphysically speaking at least, although morally and for the soul it is primary, since it is the ultimate degradation she can endure, the least she can do and be, and still exist. To sink to absolute evil would mean annihilation.

Sin exhibits the same ambiguous, negative-positive character as does the primal evil of which it is the shadow. It is essentially, if we can speak of its having an essence, a *failure* to act virtuously, a *lack* of self-determination, an *absence* of good, in the soul. Wrongdoing is *not* doing right.<sup>13</sup> At the same time, *not* doing right is *doing* wrong. It is not inaction. It is performing deeds, but deeds that are deeds of darkness, not of light. Vice, then, like absolute evil, has its positive side and expression, and is treated positively by Plotinus.

We are now ready for our last word with regard to the soul's moral responsibility for her evil deeds. The moral struggle, we may say, is not against an outer force, but against a failure of the soul's own inner power. For the presence of that weakness neither she nor God is re-

<sup>12</sup> Cf. V, 3, §§ 14-16.

<sup>13</sup> Cf. I, 8, §§ 1-5.

sponsible, any more than the sun or the light that proceeds from it is responsible for that light's fading. At the same time, just as light, however diminished and spent it may be, is still light and retains till the moment of its extinction its luminous essence and its capacity for shining more brightly, so the soul's essential self-determination to the good and her capacity for salvation cannot be wholly lost as long as she continues to exist. In a word, no matter how low she sinks, she is always able and free *not* to sin, and *not* to acquire bit by bit the evil habit and character of failing to determine her own actions. Because, then, she is always free *not* to sin, she is morally responsible for her wrongdoing. Therefore, Plotinus feels, we can say with equal right that the fall of the soul is part and parcel of the process of emanation; that it is an act of free-will; and that it is a punishment for sin.<sup>14</sup>

But how a soul that can neither determine herself to evil nor be forced thereto by anything outside herself does or can sin, Plotinus does not answer. In last resort, he can only plead that we ought not ask too much of the lesser degree of goodness and existence that is hers because of her distance from the One.<sup>15</sup>

#### XV. THE WAY OF SALVATION

We turn now from the process of emanation to the way of salvation which the soul must tread if she is to be reunited with the One. The possibility of redemption is, as we have just seen, something that the soul can never lose, short of utter annihilation. There is no soul so degraded, no ray of light so spent, as to lose the power of returning through the vast abyss of metaphysical space to mingle with its source. For all the countless light-years of procession that remove the dying spark from the central sun, it is still "God out of God, Light out of Light."<sup>16</sup>

The way of redemption is long and gradual. It may take aeons of reincarnation to traverse it, and there are no short cuts in the long windings of its ascent. Sudden conversions, short-circuitings such as seemed to be promised by the mystery-religions, irrelevant and premature ecstasies, reunions with the One in outbursts of irrational emotion, have no place in the system. In the end, to be sure, the soul will be wrapt away and united with the divine in an indescribable ecstasy, but she must first fledge herself for that last flight by a long and

<sup>14</sup> Cf. IV, 8, § 5.

<sup>15</sup> I, 8, § 7, § 10 ff.; III, 2, § 8; IV, 8, § 8 ff.

<sup>16</sup> Cf. IV, 8, § 7 ff.; VI, 9, § 7 ff.; I, 6, § 5 ff.; III, 6, § 2; V, 1, § 3 ff.

rigorous discipline, not only moral but intellectual. Without this long and careful training she would not be strong enough to attain the heights upon which redemption dwells or to bear the splendors of the beatific vision there revealed to her.<sup>17</sup>

**Moral Discipline.** First, she must perfect herself in the practice of the ordinary social and practical virtues. The world may be something to be renounced, and salvation may involve renunciation of it, but that does not absolve us from the necessity of an upright and noble participation in worldly affairs and of honest, generous and friendly relations with our fellow-men.<sup>18</sup> The body and its needs are not to be despised and suppressed, but must be disciplined in such wise that they do not distract the soul from the contemplation of higher things.<sup>19</sup>

At the same time Plotinus shows little interest in social reform and apparently feels, like the Stoics, that the good man has done his whole duty if he as an individual leads a godly, sober, righteous life under the conditions that exist. The core of human virtue, with him as with them, lies in detachment from worldly goods and evils and in a basic indifference to them, which put him out of reach of their caresses and their stings. But, whereas with the Stoics this "apathy" was an end in itself and the essence of salvation, for Plotinus it was merely a means to the next step along the way of redemption. Having attained it, the soul was now free to turn and fix her attention upon the intelligible world, and thus to identify herself utterly with that "epistrophe" towards the Divine Reason in which her true being lies.<sup>20</sup>

**The Discipline of Philosophic Thought.** But this is to pass from one discipline to another, for now the soul is confronted with the necessity of hard and intricate and correct thinking. She must perfect her power of reasoning as well as her moral nature. To do this, she must philosophize and grasp the final categories of thought and being which pervade and organize the intelligible structure of the universe and provide the fundamental terms in which she reasons. In enumerating these categories, Plotinus follows Plato, rejecting the Aristotelian and Stoic lists as superficial and unanalyzed and sometimes contradictory. The most general and the most profound assertions that we can make about the rational structure of the universe are (1) that it exists (being); (2) that it is stable (rest); (3) that it is also instinct with life and creative energy (motion); (4) that it displays sameness (identity); and (5) that it at the same time exhibits variety (difference).<sup>21</sup>

<sup>17</sup> Cf. V, 3, §§ 1, 9; I, 6, § 9.

<sup>18</sup> Cf. I, 3, § 6, 4, § 1.

<sup>19</sup> Cf. I, 4, § 1.

<sup>20</sup> Cf. I, 3, §§ 1, 6; V, 9, § 1.

<sup>21</sup> Cf. V, 1, § 4; VI, 1; VII, 2.

The discipline of philosophy terminates in the contemplation of truth, in which the soul beholds the plan of all existence, not bit by bit, but all at once, in its entirety as a single eternal fact. Wrapt away from the sensible world, and all movement and change, by the vision of eternal and immutable truth, the soul herself is no longer conscious of sensible experience and time and space, but is lifted clear of them and united with the Divine Intellect from which she springs.

Now, too, for the first time, she becomes aware of her true self. She is no longer a separate individual, one person among other persons, viewing the universe from a particular location within it, and seeing herself as a part of it, surrounded by other parts. She has transcended personal self-consciousness and has become a contemplative and synoptic vision overarching and comprehending in a single act of thought the entire plan of all truth and all existence. Nor is she any longer aware of any separation of herself from what she sees. Subject and object, the knower and the known, have become one and the same thing in her.<sup>22</sup> Now and now only is she prepared for the final ecstasy of reunion with the One.

The ascent of the soul is accompanied by a progressive purification of her affections, which Plotinus describes in terms drawn directly from Plato's *Symposium*. Starting from the loveliness of the sensible world and the human body, the soul first learns to regard all earthly beauty as a shadow or image of a heavenly prototype. Step by step her love is directed from sensible loveliness to the loveliness of virtuous conduct and works, and thence to the beauty of noble souls. Then, when once she has withdrawn from discursive and synthetic thinking to contemplation of the truth, the beauty of the intelligible and the rational will engage her affections. This will lead her to the vision and the love of the essence or Form of loveliness in itself—the highest experience of which she is capable, short of the final ecstasy of reunion with the One.

**Art a Revelation of the Divine.** Plotinus, however, does not, like Plato, scorn the artist as a mere imitator, and the work of art as the copy of a copy and therefore further removed from reality than the sensible object it portrays. The loveliness of the sensible world is a direct revelation of the intelligible order that lies at its heart. Things are beautiful or ugly according as they reveal or obscure the Form within them.<sup>23</sup> The artist is one who is vouchsafed a greater sensitive-

<sup>22</sup> Cf. V, 3, §§ 1-6.

<sup>23</sup> Cf. I, 6, §§ 1-5; V, 9, §§ 2-3.

ness to the Form of which the object of sense is the copy, and who reveals that Form in his work more distinctly than it is revealed by the object itself. All imitative arts, then, such as painting, sculpture, dancing, acting, and music, not only copy sensible objects, but copy them in such a way as to make the intelligible structure within them more manifest, and to lead the soul to a perception of the higher beauty. This is also true of productive arts, like architecture and carpentry, and even of agriculture and medicine, and rhetoric, strategy, and political economy. All of them, in so far as they are arts, arouse and purify the esthetic sense,<sup>24</sup> and help raise the soul from the sensible to the intelligible world.

Finally we must note that Plotinus chooses esthetic rather than moral experience as the closest adumbration of the mystical ecstasy in which the soul is reunited with the One. The virtues are means of purification, not ends in themselves. As long as that purification is taking place, the soul desires God as the sovereign *good*, but, when it is accomplished, and she stands upon the brink of salvation, ready for her final ecstasy, she beholds and adores him as sovereign *beauty*. The attainment of this vision is the supreme end in comparison with which all other ends are naught. The love with which it fills her—a love that is not a search but a possession, a love that is of nothing beyond herself, but of herself transfigured and consummated by the beauty she embraces—is the truest foretaste of the bliss into which she is about to enter.<sup>25</sup>

**The Final Ecstasy of Reunion with the One.** And now the soul, strengthened and prepared by the discipline of right conduct, exact thinking and properly directed love, is ready for release from the wheel of birth and rebirth, from sensible experience and every other attachment to the body, from virtue, from thinking, from the vision of eternal truth and being and beauty, from self-consciousness, and even from existence. Her final state, in which she is at last one with the One is as indescribable and ineffable as is the One itself. No category of our experience can compass or define it. It can only be described negatively. The soul who has attained it is formless, unconscious of herself, not present to herself, void of movement, desire, passion, reason, and thought. It cannot be called a beatific vision. It is rather "some other kind of seeing, ecstasy, and simplification and self-surrender." It cannot even be called union with God in the ordinary

<sup>24</sup> Cf. V, 9, § 9.

<sup>25</sup> Cf. I, 6, § 7.

sense of the term, which implies a fusion of two separate entities. The soul is identical with God, as the centers of two concentric circles are identical. She and God are not together; they are one and the same thing. The tremendous arc of emanation and redemption has returned to its starting point and the One is all in all.<sup>26</sup>

<sup>26</sup> Cf. VI, 9, §§ 10-11.

## Chapter XXII

# THE LATER NEO-PLATONISTS

### I. THE POST-PLOTINIAN TENDENCIES

It would have taken great speculative minds to sustain philosophy at the heights to which Plotinus had raised it, and these were notably lacking among his successors. His immediate disciples, though learned and zealous, were not, with the possible exception of Proclus, of profound and original thought. They were content to follow their master's teaching, and to expound it, with additional interpretations of his meaning and glosses of their own. Moreover, they tended to succumb to the fascinations of the mystery-religions from which Plotinus held himself aloof. The results were over-elaborated and subtilized systems, which the application of the allegorical method and the tendency to find theological parallels frequently made fantastic. Again, the moral outlook of the later philosophers reverted to the dualism and asceticism which Plotinus deplored, and were infused with gloom and pessimism in so far as the affairs of the world and man's earthly life were concerned.

Philosophically, a tendency to extend the trinitarian principle in describing the godhead and to multiply trinities within trinities in explaining the universe became characteristic of post-Plotinian speculation. Thus Aemilius, one of Plotinus' pupils, divided the Divine Intellect into three entities, the thought that is, the thinking that possesses this thought, and the thinking that participates in this possession and by means of it beholds the thought that is. The first entity wills the world to exist; the second expresses that will in a command; the third puts that command into effect. Individual souls, Aemilius reduced to aspects of the World-Soul. Apparently, too, he noted certain resemblances between his concept of the World-Soul and the views the Christians were at the time developing regarding the Logos.

### II. PORPHYRY

**His Extreme Dualism.** Aemilius' fellow-pupil, Porphyry, we may remember, who wrote Plotinus' life and edited the *Enneads*, was the



most distinguished of Plotinus' disciples.<sup>1</sup> A man of immense learning and a voluminous author, he composed among other things an *Introduction* to Aristotle's *Categories* which was regarded as authoritative in the Middle Ages, and which laid the foundation for all subsequent formal logic. In his *Sentences* he popularized Plotinus' system without any great departure from it, though he emphasized the distinction between the corporeal and the incorporeal. Nor could he permit the human soul in her reincarnations to sink to animal estate, as Plotinus did. But he prolonged the process of reincarnation and made of the flesh a heavier cross, harder to bear and to lay down. Indeed, the burden of the flesh is carried by us beyond the grave and to the very threshold of redemption, in the form of a more refined but still material body that survives death. Nor can union even with the divine reason, to say nothing of the final ecstasy, be attained here on earth. For the complete wisdom and goodness that prepare us for salvation, we must look to some future existence.

**Attack on Morals and Popular Religion.** This more pessimistic outlook is perhaps the result of Porphyry's more severe and fanatical moral attitude. His treatise on *Abstinence* reminds us of the prohibitions still advocated by some people. Pleasure of every description is sinful. Horse-racing, theater-going, dancing, sexual intercourse under any conditions, are abominations, and eating meat is scarcely less abhorrent in his eyes.

Furthermore, Porphyry was as pious as he was learned. He was an ardent opponent of the spirit and the practices of the popular religion, and he devoted fifteen treatises, of which we possess only a few fragments, to attacking the Christians, who by this time had become a serious menace to the established cults. The gods worshiped by the conflicting sects, the Olympians as the people conceived and worshiped them, were not in Porphyry's eyes the true gods. They were evil spirits (in whose existence, incidentally, he devoutly believed) masquerading as divinities, and pandering, through the prayers and sacrifices they demanded and the oracles they delivered, to the unholy desires and the material satisfactions of their devotees. True religion is the religion of the philosopher, who turns his back upon this devil-worship

<sup>1</sup> Besides the life of Plotinus, the *Introduction*, and the *De Abstinencia*, we possess Porphyry's *De Antro Nympharum*, *Ad Marcellam*, *Quaestiones Homericae*, and fragments of his *De Philosophia ex oraculis haurienda* and *Adversus Christianos*. Other information is drawn from Eunapius, Proclus, Suidas, Stobaeus, and Damascius.

and adores, in the persons of the Olympian godhead, the spiritual reality of which they are the symbols.

Plotinus, himself, had made a symbolic use of Hellenic theology, finding, for example, in the story of the overthrow of Ouranos by Cronos and of Cronos by Zeus, a pictorial version of the emanation of the Divine Reason from the One and of the World-Soul from the Divine Reason.<sup>2</sup> Porphyry carried the allegorical method to the extremes exhibited by Philo Judaeus in his treatment of the Old Testament stories, and illustrated every detail of Neo-Platonism with a picture drawn from Greek mythology. Apparently he, no more than Plotinus, took all this wealth of theology literally, and always saw through it to the philosophic truth it veiled. At the same time, the Olympians were the gods of religious experience and worship, the profoundest manifestations of the divine nature that it was vouchsafed to anyone except the philosopher to reach. The philosopher might have a still deeper, intellectual vision, but it was they that excited his religious emotions and satisfied his religious cravings. Porphyry truly loved them and out of that love sprang his hatred of the Christian deity who was already threatening to dethrone them and to reign in their stead.

**Belief in Evil Spirits.** The evil spirits, among whom the false gods worshiped by the populace were numbered, swarmed about the surface of the earth, and throughout all the sublunar sphere. Their power was tremendous to bewitch, to deceive, to tempt, and to seduce even the wisest and noblest of mankind. So it was that, however much Porphyry might deplore the rites, the sacrifices, the atonements, the placations, the exorcisations, the magic spells and practices, the charms and the amulets, in which the multitude placed its faith, he had no doubts as to their necessity or their actual efficacy in curbing, directing, and warding off the machinations of these malignant forces.

### III. IAMBlichus

**Philosophy a Defense of Theology.** The rising wave of religious fervor upon which, as we have already noted, the whole Neo-Platonic movement was borne, became from this time on more and more frankly expressed in contemporary philosophy. With the Syrian Iamblichus, Porphyry's pupil, theology is no longer primarily an allegory and symbol of philosophic truth. Its figures have a metaphysical

<sup>2</sup> Cf. III, 6; IV, 3; V, 1, 8; VI, 9.

validity, and take their place among the entities emanated by the First Principle. At the same time the relations of philosophy and theology tend to become reversed. The metaphysical system of which the theology was formerly the symbol retreats into the background, and the gods come more and more to the fore. It is now the business of philosophy to define and relate and defend them in terms acceptable to the intellect.

The wealth and multiplicity of the Hellenic godhead, of which the deities also of the mystery-religions had by this time become persons, necessitated a more complicated philosophic background than that afforded by preceding systems. The means for its expansion were indicated by the trinitarian method of Plotinus and Porphyry, already amplified by Aemilius. Inspired by the Pythagorean theory of numbers, Iamblichus proceeded to multiply trinities within trinities. From the One, which is so transcendent as to be unable to communicate even its blank oneness to the universe, there proceeds the One that can communicate itself and generate number or multiplicity, and from the one-in-many thus produced the Divine Intelligence proceeds. This in its turn is a trinity of the knower, knowing, and the known, each term of which is subdivided into a triad. It is the intelligible model or paradigm of the world, the dwelling place of the numbers and Ideas. From it emanates the creative power, analagous to the divine workman of the *Timaeus* and the Plotinian World-Soul, and the gods who dwell outside the world. Finally come the gods within the universe, the gods of the Hellenic theology, who directly rule our destinies and with whom religious experience comes in contact. These are the gods who count. To them we build our temples and raise our altars, address our prayers, and dedicate our rites and sacraments. Their number is that of the planets, the signs of the zodiac, and the days of the year.

**The Plight of the Human Soul.** The human soul is immeasurably removed by all these intervening levels and kinds of being from the incommunicable source of all existence. Furthermore, she is beset on all sides by evil demons, in whose existence and power Iamblichus believed no less devoutly than did Porphyry. Nor is the ladder of salvation sufficient ever to unite her with God, or even with the Divine Reason. In the highest possible state to which she may attain, she is still in the toils of sensible experience and attachment to the body, which cling to her beyond the grave and weigh her down to all eternity. The space separating her from God, never so tremendous for

Plotinus that it might not be recrossed by the soul in search of him, has become an impassable gulf, which even redemption cannot bridge.

Nay more, the soul is no longer, as she was with Plotinus, able of her own self to turn away from evil and attain such salvation as is possible for her. She needs the help of the gods to enable her to escape the snares of the demons who plot her destruction, and she can invoke and obtain divine aid only by the rigid observance of prescribed rites and sacraments. Iamblichus was as firm a believer in the efficacy of magic as Porphyry, and is reputed himself to have possessed mediumistic and miraculous powers. It is said that he could levitate, perform materializations, and converse with the spirits of the dead.

#### IV. THE ESTABLISHMENT OF CHRISTIANITY

Iamblichus died about 330 A.D. Some twenty years earlier, Constantine, at the time one among six pretenders to the imperial throne, had had, it is said, a vision of the Christian cross, promising him victory in an impending battle with his rival, Maxentius, if he would adopt it as his standard. This he did, and Maxentius was not only defeated, but drowned as he fled the field of battle. Furthermore, Constantine's fortunes continued to prosper. He disposed of the other pretenders one by one, and in 324 became sole ruler of the Empire. He now proclaimed Christianity to be the official faith, though he was baptized formally into it only on his deathbed. The eventual success of the new religion was assured.

The Christian leaders, however, once in the saddle, aspired to political power and tried to control the Emperor. In spite of the Council of Nicaea and the promulgation of the Nicene Creed, they were still at loggerheads over points of theology. The Arians refused to accept the Council's decision that the Son was co-equal, co-eternal, and consubstantial with the Father and clung to their position that he was secondary in majesty and of similar rather than identical substance. Over this question of sameness or likeness a controversy continued to rage, inflamed by passions and marked by attempts at reciprocal persecution out of keeping with the peace, charity, and brotherly love which the Christians preached and promised to the world.

Their behavior in these respects was unlike that of the priests of the old religion, who were not politically ambitious, or desirous of influencing the administration of the Empire; and who, moreover, were tolerant of other religious faiths and willing to receive them hospitably and to live with them on friendly terms. Hitherto, civil life

had been undisturbed by theological disputes, nor had the throne had to concern itself, in matters religious, with complaints, recriminations, propaganda, and demands for imperial intervention. Drawn into these quarrels, Constantine supported the decisions of the Council of Nicaea, but his son Constantius, to whom a portion of the Eastern Empire was left, and who eventually succeeded in making himself master of both East and West, favored the Arians.

#### V. THE DISESTABLISHMENT OF CHRISTIANITY BY JULIAN

**Julian's Apostasy.** In 361 Constantius was succeeded by Julian, Constantine's nephew. Brought up in the Christian faith, Julian seems in his early youth to have become dissatisfied with it, and though outwardly still professing it, to have inwardly turned back to the old religion for inspiration and support. On his accession to the throne, he openly proclaimed his allegiance to the ancient faith and disestablished Christianity. Because of this, the Christians called him "The Apostate."

Julian's abjuration of Christianity was due in part to a deep love and enthusiasm for ancient Greece and its way of life. It was also influenced by his interest in philosophy and his friendship with the Neo-Platonist teachers of the day. Among them he was particularly intimate with Maximus and with Sallust, the reputed author of an elaborate treatise *On the Gods*. Maximus seems to have been something of a charlatan, who impressed Julian with his display of mediumistic and magic powers. But the treatise *On the Gods* appears a sincere attempt to defend the existence of the Olympians, very much as Iamblichus had defended it, by fitting them into the hierarchy of emanated beings that intervened between the supreme deity and the sensible world. They are the objects of religious experience, of worship, and of ritual and sacramental approach. The higher orders of deity and the First Principle itself can be reached only by philosophic meditation.

**Formal Disestablishment of Christianity.** When Julian disestablished Christianity, he did not return persecution for persecution, and take against it the suppressive measures it had itself advocated against other faiths. Indeed, he issued an edict ordering universal religious toleration. But he did all he could to discourage the new religion, and went so far as to forbid the teaching of Christian doctrine in the schools and universities. Moreover, being himself not only a devout polytheist

but a philosopher, he descended into the intellectual arena and argued at length against the Christian system.<sup>3</sup>

**Julian's New Religion.** But Julian saw also the vices of the ancient faith. He was a man not only of great intelligence and ability, but gentle and humane, and of a high morality, who hated the moral and political corruption with which he was surrounded, and dreamt of a new order in which the virtues preached by the Christians would be incorporated. It was, then, a polytheism reformed and purified, not only theologically, but ethically, that he sponsored—almost, indeed, a new religion of his own. He seems to have regarded the gods much as Porphyry did—not as metaphysical entities, but as symbols in which religious experience grasps the deeper philosophic reality behind them. So far as that experience is concerned, with Julian it centers upon the sun—the Sovereign Sun, as he calls it—the giver of life and light and goodness to the world. This exaltation of the sun in his new religion was perhaps due to his earlier adherence to the cult of Mithra of which we have already spoken.

Julian, however, not only tried to focus the whole polytheistic system about the divine figure of the hero sun-god, "mighty in strength, mighty ruler, greatest king of the gods . . . lord of heaven and earth, god of gods," but provided for his religion a philosophic support, characteristically Neo-Platonic, but much simpler than the foundations proposed by Porphyry and Iamblichus. The visible sun, in his opinion, incarnates and gives sensible form to an emanation, conceived after the fashion of the second person of the Neo-Platonic and Christian trinities, which rules and animates a world of pure intellects, or spirits, or gods. This emanation proceeds from the First Principle, the sovereign good, which rules and gives being to the world of Platonic Ideas.

In the same spirit, Julian interprets the cult of the mother of the gods and of her beloved, Attis. The Great Mother is the First Principle itself. Her love for Attis symbolizes the emanation of the divine intellect; Attis' infidelity to her means the creation of the material world; his emasculation indicates that creative power has reached limits beyond which it cannot go and by which it is turned back towards its source.

Scarcely less distasteful to Julian than the Christians were all those non-Christians who for one reason or other opposed his new inter-

<sup>3</sup> Of Julian's works we possess his *Orations*, *Symposium*, *Misopogon*, and numerous letters, the most important of which are addressed to Themistius, and to the Athenian Senate and people.

pretation of polytheism and refused to accept his reformed religion. In his *Discourse against Ercilius* we have his reply to their attacks, and a further defense of his symbolic polytheism. The ancient myths, he points out, are the ways in which the human mind grasps and represents to itself a divine reality too high and too pure to be envisaged except in the images they present, or to be approached except symbolically through the sacraments and ceremonies they prescribe.

But for all his political and military ability, his intelligence, his high-mindedness, and his true piety, he was scarcely less a victim of the superstitions of his age than were Porphyry and Iamblichus. He was a firm believer in the efficacy of magic, with its formulae, its rules, its incantations, its divinations, its omens and its oracles.

**Superior Strength of Christianity.** Julian died in his early thirties in 363 A.D. By then Christianity was too widely diffused and too securely intrenched among all classes to be dislodged. It had already seized the cities and relegated the ancient cults to the rural communities or "pagi," and thus had enlisted in its service the snobbery with which the city-man is apt to regard the "country bumpkin." No more than five years after Julian's death, this social stigma was legalized by the Emperor Valentinian in an edict in which he refers to the non-Christian cults as "pagans," or, as we might say, "hayseeds."

It is not surprising, then, that Jovian, Julian's immediate successor, promptly re-established Christianity. Its restoration was attended by some sporadic persecution both of the non-Christian cults and of philosophy, of which the most notorious instance was the martyrdom, at the hands of a Christian mob, of the learned lady, Hypatia, head of the Neo-Platonic school at Alexandria. By and large, however, there was little forcible interference with either the old philosophy or the old religion. Both were left in comparative peace to die in each other's arms of inanition and old age. Within some thirty odd years, the great temple of Serapis at Alexandria had been torn down, various other temples of the ancient creed had been delivered over to the Christians, and the Roman Senate had been officially converted.

## VI. THE END OF ANCIENT PHILOSOPHY

**Last Days at Athens.** But before Greek philosophy was finally and formally extinguished it had a brief moment, not of lucidity perhaps, but of such vigor as its senility could muster. Appropriately enough, its dying rally occurred in Athens, where even the Christian converts could not be persuaded to despise, or in their hearts to forsake, the

ancient gods, and where reversion to polytheism under Julian had taken place without a qualm. For years, too, Greece had been a back-water, removed from the main currents of imperial life and activity, and Athens had been a quiet university town, of no political ambitions or account, living entirely on the memories of her past. The persistence there of the ancient creed and of non-Christian philosophy might, then, well be regarded as harmless. However that may be, the Schools at Athens remained unmolested by even such mild suppressions and persecutions as plagued the "pagan" philosophers elsewhere. They were still free to think and to teach as they choose, and their liberties were guaranteed them by imperial edicts respectful of their learning and of their great traditions, and quite conscious probably of their innocuousness.

**Syrianus.** The two principal figures in the revival of philosophy at Athens were Syrianus and Proclus. Of Syrianus' writings we possess only a commentary on Aristotle's *Metaphysics* in which he tries to reconcile Aristotle's doctrine that the individual alone is real with the Platonic teaching that all reality abides in the universal. Number, he tells us, overcomes this difficulty, since mathematical entities, as Plato said, are intermediate between the universal and the particular, and have the characteristics of both. It is, then, a form of existence intervening between and uniting the concrete being of Aristotle and the universal being of Plato.

**Proclus.** Needless to say, Syrianus' commentary on Aristotle was written with a Neo-Platonic background, which he developed in two lost treatises on the *Parmenides* and the *Timaeus*. The views he expressed there seem to have differed little from the teachings of his pupil Proclus, from whom we draw all our knowledge of them. Proclus was a thinker of great ability. He was also profoundly religious and an ardent supporter of the ancient creed. For this reason he was especially hated by the Christians, and, it is said, was forced at one time to leave Athens because of their hostility. In the conduct of his own life he was ascetic to a degree, and he was extremely punctilious in his observance of all the outward forms and ceremonies of his faith. With this religious zeal and severity of self-discipline he combined a lovable nature, great personal charm, and unusual physical beauty, of which, for all his unworldliness, he was not unconscious. Born in Constantinople in 412, of wealthy parents, he received as a youth the best of educations in Alexandria, and later in Athens under Syrianus, whom he succeeded there as head of the Neo-Platonic school. Among his pupils he quickly acquired a reputation not only for great sanctity,



but for miraculous powers, which he used to heal the sick, to procure rain, to avert earthquakes, and to perform other magical feats.<sup>4</sup>

In his philosophizing, however, Proclus was meticulously logical. He adopted the dialectical method initiated by the Eleatics and developed by Socrates and Plato. Zeno, it will be remembered, argued negatively the truth of the Eleatic position by pointing out the absurdities involved in its falsity, and Socrates and Plato pressed their points by a process of progressive self-questioning and self-answering and increasingly definite analysis. In the same way Proclus' habit was to deduce and compare all the positive and negative consequences of both the truth and the falsity of a given proposition.

By this method of self-questioning, which is really an application of the maxim "know thyself," the mind, he said, is led to distinguish within itself two orders of experience, the sensible and the intellectual, whose objects are the physical and the intelligible worlds. The logical exploration of the first of these realms gives us "physiology," of the second, theology.

**The Ineffable Nature of the One.** The cause of all being is even more ineffable, indescribable, and incommunicable than it was for Plotinus. Not only is the One neither life, nor consciousness, nor thought, nor being; it is also beyond eternity and beyond godhead. All we can say of it is that it is both the source from which we spring, in which capacity the term *One* most nearly fits it, and the goal of all our striving, in which capacity it is best described as *good*. But Alpha and Omega, the beginning and the end, flow together, since unity is order and goodness is unity.

The One generates because of its goodness and without destroying its unity. The first emanation is not, as with Plotinus, the Divine Reason, but as with Iamblichus the realm of Numbers, an order of units each one of which images, as far as separate, existent and dependent entities can, the absolute oneness of its source. These units, like the Platonic Number-Ideas, are unaddible and therefore do not constitute a number series or afford a means of counting. Hence they do not constitute a many. Each one of these units, however, can communicate itself, and thus initiate a series of numbers participating in it—

<sup>4</sup> The extant philosophical works of Proclus comprise his *Commentaries* on various Platonic Dialogues; *In Platonis theologiam*; *Institutio theologica*; *Institutio physica sive de motu*; *De physica auscultatione*; *De providentia et fato*; *Decem dubitationes circa providentiam*; *De malorum subsistentia*. Besides these, we have works on astronomy, mathematics, and grammar.

Plato's mathematical entities as distinguished from the Number-Ideas. From Numbers the Divine Intellect proceeds.

It will be noted here that we have a trinity of a One that is incommunicable, a One that can communicate itself (Idea-Number), and a One that can partake of communicable unity (mathematical number). This trinity of the unshared, the shared, and the sharer, already advanced by Aemilius and Iamblichus, became a veritable obsession for Proclus, who proceeds to repeat and multiply it *ad infinitum* in the Divine Intellect and the World-Soul.

**The Divine Intellect, the World-Soul, Nature, and the Physical Universe.** The World-Soul is the intermediary through which the Divine Intellect creates, and through which the goodness and rationality of the intelligible order are communicated to the sensible universe. The physical world is the body of the World-Soul, emanated from it, and united with it in such wise that the two constitute a single living organism. But this union also requires an intermediary—*Nature*, as Proclus calls it. Nature is the incorporeal principle of movement and alteration, which directs the ceaseless "becoming" of the sensible world in accordance with the intelligible model. But whereas the activities of the World-Soul are entirely rational, those of Nature spring in part from soul and reason and in part from the material character of the objects whose changes and motives she directs. Hence the world-process is a mixture of purpose and necessity.

The universe itself is, as Plato taught, a mixture of the definite and the indefinite, of Form and Matter. Because of its material character it is extended. It is also everlasting, without beginning and without end. It is orderly, since all the seeming disorder of its parts and movements conceals a hidden harmony and symmetry of the whole. It is also perfect and happy in its entirety, in spite of partial and particular appearances to the contrary. It is a sphere, or rather a nest of spheres, in which the heavenly bodies are carried. It is composed of fire, air, water, and earth.

**The Problems of Evil and Matter.** Needless to say, Proclus now finds himself confronted with the problem of reconciling evil in all its forms with the goodness of the creator and the perfection of his handiwork. His justification of the ways of God to man is more detailed and more subtle than that of Plotinus, but, since in the long run it does little more than rehearse the arguments of the Stoics and of Plotinus, we need not further concern ourselves with it.

Matter is as indefinable for Proclus as it was for Plato and Plotinus. It is beyond and *below* forms of being, just as the One is beyond and

*above* them. But it has to be there to account for the existence of a sensible as well as an intelligible world. It is not, however, evil, as Plotinus maintained. It has about it some faint semblance of good and is therefore derived from the divine substance.

**The Human Soul and Free-Will.** The human soul is derived from the World-Soul. She has one foot in the intelligible world, the other in the sensible world. She therefore feels as well as thinks. Moral and spiritual progress consists in disengaging her rational part from the obscurations of sensible experience. In outlining the successive steps of this progress Proclus follows Aristotle and Plato and Plotinus.

Being derived from the World-Soul, the human soul is naturally good. When she acts according to her nature, or in other words freely, she will never sin. This freedom of self-determination is true freedom. Evil action is interference with her freedom, is incomplete freedom. The possibility of choosing the wrong course is a sign of imperfection. The divine *cannot* choose evil. On the other hand, man, being imperfect, *must* be capable of *not* acting according to his nature. This capacity exposes him to determination by external causes, and may make him, so to speak, a mere pawn in the play of outer forces. But since he *may*, though unlike God he *need*, not choose the good, he is morally responsible for not choosing it. However, even if he chooses evil, all seems to be ironed out in the end by providence, which weaves his evil deeds into the fabric of the universe in such wise that they do not detract from its perfection.

Furthermore, it is providence that keeps the soul from succumbing to the presence of external events and that gives her strength to resist temptation and to choose the right course. Abandoned to her own powers, she could not achieve redemption. To be saved she needs divine support.

**Philosophy and Religion.** It is into this system that Proclus works the ancient theology, supplementing the philosophic trinities with theological ones. Eventually Zeus is generated as a member of one of these trinities and from him proceed the other Olympians, arranged in descending triads dwelling within the World-Soul. Finally in the sensible world we find angels, spirits, heroes, and, lowest of all, human souls.

Since it is to these gods that man must look for salvation, the performance of his religious duties and the observance of all the ceremonies and rites of the church is of the utmost importance. Prayer is indispensable, for by prayer we are raised towards the divine and prepared for our final union with deity. But, Proclus insists, it must

never be motivated by the desire for worldly benefits, or by fear and the desire to placate the gods.

**The Successors of Proclus.** Proclus died in 485 A.D. His successors, Damascius, Olympiodorus, and Simplicius, were men of little account, though their writings are invaluable for a knowledge of the period. Damascius, dissatisfied with both Plotinus and Proclus, re-attacked the problem of deriving the many from the One, not-being from being, the universe from God. He also sought to give a philosophical background, not only to Greek theology, but also to the Oriental religions, and to find least common denominators for their various gods.

With Olympiodorus the gods seem to have lost the theological and metaphysical status accorded them by Proclus, and to have relapsed once more into symbols. The learned Simplicius confined himself largely to commenting on Plato and Aristotle and the Stoics, and to endeavors to iron out their differences and reconcile their teachings.

**Closing of the Schools at Athens.** But Neo-Platonism and the ancient faith, both of them already sterile and incapable of producing by their union a new truth or life, were now in a state of coma. Brief convulsions marked their end. Justinian mounted the throne of Byzantium and became Emperor of the Eastern Empire in 527. Even before his accession measures were being taken to suppress paganism and the philosophers who supported it, and one of his first acts was to institute fresh persecution. Profession of the ancient faith was made a penal offense. In 529 the Schools at Athens were closed by imperial edict. The last Neo-Platonists, among them Damascius and Simplicius, fled to Persia for refuge. But their reception was not all that they had hoped, and they returned. Safety was assured them by the treaty of peace made between Justinian and the Persians in 533, which stipulated, among other things, that they should be unmolested and allowed to die in peace. With them died Greek religion and Greek philosophy. The famous prophecy uttered, it is said, by Julian on his death-bed had been fulfilled. The Galilean had conquered.

## Chapter XXIII

# CHRISTIAN PHILOSOPHY THROUGH BOETHIUS<sup>1</sup>

### I. PHILOSOPHY, THE HANDMAID OF CHRISTIANITY

**Philosophy as a Defense of Revealed Truth.** We have now to retrace our steps some four hundred years or more and to record the beginnings and the development of another enlistment of philosophy in the service of religion.

The new religion, however, differed in one respect from the old. The service of the ancient gods was one of perfect philosophic freedom. As long as their existence was not denied—and even that could be safely challenged save in religiously conservative communities like Athens—freedom of criticism and speculation was untrammelled by interference from priest or populace. Heresy was a thing as yet unknown. But now the true version of the nature and the constitution of Reality, which in the past had been sought by the use and tested by the standards of reason, was made manifest once and for all to all mankind by God speaking through the Hebrew prophets and through Christ. There was no gainsaying the content of this revelation. Even to question it was heresy, and heresy might have disagreeable consequences.

Under Christianity, then, philosophy was deprived of her essential activity of inquiring freely into the nature of the Real and of fearlessly publishing the conclusions drawn from her investigations. Her task was now to expound and defend the content of revelation in terms acceptable to the intellect as far as this was possible, and, where it proved impossible, her only course was to bow before a mystery of faith too high for her understanding, and to incline without questioning before the wisdom and authority of Scripture and of the councils of the Church.

<sup>1</sup> I have no first-hand knowledge of Patristic and Scholastic thought and texts. The following chapters are founded for the most part upon the histories of Medieval and Scholastic philosophies by Gilson and De Wulf, and upon Ruggero's *Filosofia del Cristianesimo*.

**Plato and Aristotle.** However, the situation in which she now found herself was partly of her own making. Bound to accept revelation, she also bound herself to interpret it, not by new and original thinking, but by calling in, first Plato and the Neo-Platonists, and then Aristotle, to bear the brunt of her new task. Thus she curtailed by her own action what freedom Christianity left her, and, in addition to the yoke imposed by the new religion, imposed upon herself the yoke of the ancient metaphysics.

From an epoch of double servitude, we ought not to expect too much in the way of original thinking. What to think about was determined by revelation; how to think about it by Plato and Aristotle. Still, there are mitigating circumstances that must be borne in mind. In the first place the transformation of the classic systems into an apology for revealed truth required ingenuity, in which philosophy was not found wanting, and there was still occasion for profundity in dealing with questions that did not trespass upon dogma. Even in the Middle Ages, after the details of revelation had been meticulously worked out and Christian doctrine had become crystallized, there still remained a large field in which philosophy could move comparatively freely without ecclesiastical interference.

**Contribution of Philosophy to Revealed Truth.** Again, we must not forget that the theological as well as the philosophic fetters by which she was gradually bound were largely of her own forging. What counted in the end as revelation was largely her work. Jesus and his immediate disciples had revealed very little in the way of metaphysics or theology. Like Socrates, they were not interested in such subjects, but intent rather on preaching a way of life, and were content to accept as the source of their inspiration and the background for their mission their national God moralized and universalized to accord with their higher ideals of what life and God should be. Whatever Jesus believed of himself and whatever his disciples believed of him, they believed simply and naïvely without analysis or speculation. Even at the end of the first century, after Jesus had become an incarnate, dying and rising God worshiped with the rites and approached through the sacraments characteristic of the mystery-religions, orthodoxy was still at a minimum. For that matter, there were still Christians who would have nothing to do with the deification of Christ and persisted in regarding him as simply a prophet of superior sanctity and attainments.

## II. EVOLUTION OF CHRISTIAN DOGMA

The writings of Paul and documents like the Epistle to the Hebrews and the Fourth Gospel show, however, that Jesus' worshipers now included men of considerable talent prone to metaphysical speculation. They show, furthermore, that these men were interpreting his status as the incarnate Son of God in the light of contemporary Neo-Pythagorean and Neo-Platonic philosophy. But even so, the relation of the Son to the Father and of the Holy Ghost to the Father and the Son was still a wide-open question, and many other important theological problems were still more vaguely formulated and further from definite solution.

**Conflicting Christian Views.** The next two centuries of Christian thought abounded in conflicting speculations and conclusions, among which it would have been difficult to distinguish future heresy from future orthodoxy. Indeed, what was finally accepted as revealed truth was largely the product of a struggle between the most diverse points of view, the outcome of which was determined, in part at least, by philosophic considerations and on philosophic grounds. It was only as some philosophic hypotheses rather than others received in an Ecumenical Council a majority vote, believed by the Church to be inspired by the Holy Ghost, that they were regarded as revealed and became Christian verities.

**The Gnostic Sects.** It is impossible, however, for us to follow the development of the fortunes of all these diverse and conflicting speculations. As an example of their variety and reciprocally contradictory character, we may note a few of the more divergent. For instance, there were the various Gnostic Christian sects, which drew both upon the other Oriental cults and upon Neo-Platonism in formulating their doctrines. The Gnostics tried to treat Christianity much as Proclus tried to treat polytheism. The Valentinian Gnostics, for example, regarded it as a kind of terminal product of an incredibly complicated system of emanations and intermediary beings descending from the ineffable One to a sensible world whose imperfections and very existence are due to forces of evil rather than of good. This extreme dualism of God and the universe they paralleled with an equally extreme opposition of the human soul to the world and the flesh and the devil. The soul is fallen so low that her redemption would be impossible had not Jesus, the mightiest of the divine emanations or aeons, taken pity on her and descended into the sensible world to show

her the way back to God. This return is effected by the observance of a system of rites and sacrifices, endowed with magic efficacy. Indeed, magic and astrology loomed as large as they did in contemporary non-Christian religion and philosophy.

**Manichaeism.** The dualistic and the diabolistic interpretation of the Gnostics persisted as a powerful movement, which in the form of Manichaeism we find still very much alive at the end of the fourth and the beginning of the fifth centuries. But, since this movement proved a blind alley and contributed little or nothing to the development of orthodoxy, save perhaps a belief in the objective and automatic efficacy of the sacraments, we may leave it to one side.

**Controversy About the Trinity.** Meantime, controversy that was helping formulate eventual Christian orthodoxy was centering in the question of the Trinity and particularly in the relations of the Son to the Father. For instance, at the other end of the scale from those who contended that Christ was simply a great prophet were the Patripassians who identified him with the Father and maintained that in his crucifixion the Father himself suffered death upon the cross. There were also the Sabellians who regarded Father, Son, and Holy Ghost as merely three aspects of one and the same divine person. Again, there was the party, later represented by Arius, who considered the Son a created being of different but similar substance. Still again, we have the Montanists who protested against the development both of worldliness and theology within the Church, and believed themselves to be the special beneficiaries of a new descent of the Holy Ghost, under whose leadership they were to restore primitive Christianity. Finally there were those who under the guidance of a saner Neo-Platonism than inspired the Gnostics were marching slowly but surely towards the formulation of the Nicene Creed.

### III. CLEMENT AND ORIGEN

In keeping these last in step two men, Clement and Origen, played an indispensable part. Both were members of the church at Alexandria, learned in contemporary philosophy and sympathetic with other religions, which they regarded not as essentially false and diabolic but as such imperfect intimations of the nature of Reality as religious experience and reason unenlightened by revelation could achieve. Both were strongly influenced by Philo's doctrine of the Logos in their discussion of the relations of the Father and the Son, and were ardent advocates of his allegorical method of interpreting Scripture, which



material universe are not *begotten*, neither do they *proceed*. They are *made*. They are not *emanations from* the divine. They are *created by* the divine, have a different substance from the divine, and therefore differ from it fundamentally in kind as well as in degree.

**The Fall and Redemption of the Soul.** The eternity of the created implied, however, that human souls were eternal and therefore existed before birth. Origen accepted pre-existence, though he denied reincarnation. Like Clement, he conceived salvation as a cosmic process of which human life here on earth is but an episode. The Father created through the Son a perfect universe and perfect souls to inhabit it, endowed with free-will. Some abused their freedom, among them Lucifer, and fell, never to rise again. Others, who used it to soar towards God, form the celestial hierarchy. Still others, more lightly sinning and not wholly separated from the love of God, became human beings who exchanged their ethereal raiment for gross physical bodies.

Sin, therefore, is in a sense original, because the very presence of the soul in a human body is the sign of a fall. It is also in a sense inherited from Adam, since the bodies descended from him were begotten after his expulsion from Paradise. But human freedom remains intact. It is beyond the reach of divine predestination, and the way it will be exercised escapes even the foreknowledge of God. Nor can divine grace do more than suggest and incite and support virtuous action. It cannot compel it.

The evil in the world, then, man has brought upon himself, and his sufferings here and now are the wages of his sin and the means of its purgation. But our earthly life is not sufficient to determine our damnation or salvation. Almost all human souls leave the body with that question undecided and in need of further testing. This period of probation and correction, as with Clement, will last till the Day of Judgment. Till then it is open and free to all souls to accept or to reject Christ and his salvation. Finally, on that day the redeemed and purified will return to their original state as pure intelligences. Then, too, the Son, having by the operation of the Holy Ghost subjected all things unto himself, will himself be subject to the Father, and God will be all in all.

#### IV. IRENAEUS AND TERTULLIAN

**Irenaeus' Attack on Dualism.** In the West, in the meanwhile, two men were playing a great part in those developments of Christianity of which the church at Rome was the center. They were Irenaeus and

Tertullian. Irenæus, born at Smyrna about 135, and later made bishop of Lyons, devoted his energies to refuting Gnostic and other heresies—a work to which his great contribution to the crystallizing of orthodox Catholic dogma was incidental. The current metaphysical and mythological dualism he combated at some length, as well as the original Platonic dualism of the Ideas and the sensible objects patterned after them, from which he supposed these theories sprang. These dualisms, he argued, limit the power of God and make both God and the principle opposed to him part of a third, inclusive reality, and these three part of a fourth, and so on *ad infinitum*. The first principle, then, from which all things proceed, instead of being God, will lie at the end of an infinite regress, and can never be reached. Furthermore, if the world and man are essentially evil, and mankind is incapable of finding God, redemption is impossible and the Incarnation is futile. Man, however, can be reconciled to God by the aid of Christ. In him God became man in order that man, separated from God by a created and therefore imperfect nature, of which Adam's sin was the expression, might be raised to divine estate.

**Tertullian.** Tertullian, born at Carthage in 160, a fighter in temper and a lawyer by profession, offered to the Christian cause, which he embraced at the age of thirty-three, not only all the resources of a fanatical, passionate and uncompromising character, further fortified by an excellent classical education, but the superabundant zeal and devotion that so often mark the convert of mature years. His one aim was to show that everything in Catholic Christianity was superior to everything in any other religion, and to this task he brought all a lawyer's skill and frequently the speciousness of the special pleader. In his later years, disgusted with the growing worldliness and politics within the Catholic party, he deserted it and joined the Montanists.

**Credo quia Absurdum.** Tertullian is famous in the history of philosophy for his saying, made with reference to the Christian doctrine of God's sacrifice of himself on the cross, "*It is believable, because it is absurd; it is certain, because it is impossible.*"<sup>2</sup> This remark, which contrasts with the view held by both Clement and Origen that revelation must be reasonable, is of double significance. On the one hand, it overstates Tertullian's conviction that the individual's immediate intuition of God in religious experience is the surest witness we have to the existence and nature of a deity—surer than rational proof, and surer even than Christian revelation whose purpose is to confirm the

<sup>2</sup> De Carne Christi, 5.

certitude and to enlarge the knowledge the soul already possesses. On the other hand, it testifies to the presence of the growing conflict between the claims of faith and reason.

But for all his intuitionism Tertullian was more than ready to argue about the mysteries of faith. His earlier doctrine of the Trinity points towards Plotinus in the teaching that the Son is an "extension" of the Father and in his illustration of his meaning by the analogy of the sun projecting itself unchanged and even amplified in the light proceeding from it. Later, however, in his eagerness to refute all anti-trinitarian views he overemphasized, if anything, the distinction between the Son and Father and incidentally seems to have "subordinated" the one to the other.

**Substitution of Intuition for Reason.** We may note Tertullian's substitution of immediate intuition for reasoning as the primary source and the final judge of certitude respecting the existence of God. Moreover, we may remark that Tertullian's contention that the senses are to be trusted and that their reports can be accepted without the audit of reason is quite un-Platonic. Nor, he feels, is there any psychological ground for Plato's opposition between perception and thought and his attribution of them to different faculties and parts of the soul. Their objects, to be sure, differ, since the one is concerned with things apparent, the other with things unapparent, to sense. But it is the same hand that grasps both the sensible and the intelligible. Finally, Tertullian argues in a Stoic and certainly un-Platonic way that the soul, being created, is material. Nay more, she has need of the flesh to come to full fruition, display her powers, and exploit her possibilities of life and happiness. Matter, then, far from being evil, as the Gnostics maintain, is good, and all aspersions cast upon it are impious reflections upon the work of the Creator. The need of the body persists after death, wherefore the eventual resurrection of the body and its reunion with the soul.

#### V. AUGUSTINE

**The Nicene Creed.** In the interval that separates the epoch we have been studying from Augustine, there is no Christian philosopher of great note. Nevertheless it was a pregnant period. It gave birth to Plotinus, whose influence upon Christian thought, in the Eastern churches, at least, was immediate, widespread, and profound. His effect upon the West came later, largely through the influence of Augustine. But, once established, it became so powerful that the opinion has been advanced that even in the Middle Ages he, rather than

Aristotle, was the dominating figure.<sup>3</sup> In 325, as an incident in the prolonged Arian controversy to which we have already referred, the Nicene Creed was promulgated, and the doctrine of the Trinity was crystallized. The bone of contention among the orthodox now became the precise relation of the divine and human natures in Christ—a question that evoked as much discussion and produced as many heresies as those that had raged about the Trinity.

**Augustine's Platonic Influences.** Augustine was born in 354. After a youth whose profligacy his later repentance may have somewhat exaggerated, and after a period of skepticism and brief adherence to Manichaeism, he was converted to the Catholic faith. Eventually he became bishop of Hippo. He died in 430. He was a prolific writer and his works, of which the best known are his *Confessions* and the *City of God*, exercised great influence over subsequent developments of Christian thought.

His conversion to Catholicism, it is said, was due largely to his reading of Plotinus, whose *Enneads* had by this time been translated into Latin. However this may be, he is dominated by Platonic and Neo-Platonic influences, and we hear from him next to nothing of Aristotle. These influences led him to recoil from Tertullian's confidence in the senses and emphasis upon the body. He shared, to be sure, Tertullian's opinion that the primary source of our certainty of God's existence and nature lies in our inner intuition of the divine being. *We must first believe*, he tells us in one of his most famous assertions, *in order that we may know*. But this inner intuition is intellectual in character. The senses are not to be trusted, and the objects with which they present us are unreliable images of truth. The certainty of our intuition springs from the fact that it is of the very nature of reason to know the truth. Knowledge is an inner illumination of the soul by God. Hence whatever is *intelligible* is certain. But among things intelligible and therefore certain are the fact and the content of revelation. Knowledge, then, though it springs from intuition, confirms and amplifies the certainty of faith. We believe in order that we may know, but *we also know in order that we may believe*.

**Arguments for the Existence of God.** The essentially true character of the concepts of reason is the chief of the many witnesses to the existence of God, which is also attested by the necessity of a first cause, the rational character of the universe and the universal belief in his existence. Being true, these concepts must be necessary and unchange-

<sup>3</sup> Cf. Picavet, *Esquisse d'une Histoire Générale et Comparée des Philosophies Médiévales*.

able. Therefore that which gives rise to them, and to which they refer, must be equally necessary and immutable. There exists, then a necessary and unchangeable being—to wit, God. Such a being must be all and more than our reason says he is. Although his essence transcends all the categories of our experience (like the Plotinian One) yet our concepts of goodness, justice, wisdom, omnipotence, and the like approximate his nature (as Origen taught).

These qualities are unfolded, and his rational character is revealed in the person of the Son in whom he conceives the world of Platonic Ideas, which serves as the example or pattern of the universe, and through whom he creates the sensible world in its image. Incidentally this world of archetypes contains not only universals but Ideas of individuals, as Plotinus asserted. The Ideas form a single harmonious whole, and therefore the universe modeled upon the intelligible order is beautiful and good, appearances to the contrary and the Gnostic assertions of its evil nature, notwithstanding.

**Theory of Creation.** In his theory of creation, Augustine continues and strengthens the orthodox Christian view, already set forth by Clement and Origen and by this time generally accepted. The universe is not created out of a pre-existing matter co-eternal with God, as Plato taught. It did not emanate from God before all time and is not therefore consubstantial and co-eternal with God, as Plotinus maintained. Nor is it the eternal expression of an eternal act of creation as Origen believed. It was created out of nothing at a given moment by an act of God's free will. This given moment was, however, the first moment. Hence the universe and time are created together. This disposes of the objection that if the universe is not eternal, God's creative power must have been idle for a time before he exerted it. It disposes, too, of the argument that his will to create must be an after-thought and sudden whim. God's determination to create a universe, and to create this universe rather than some other is, like himself, eternal. There never was a *time* when it did not exist. It is not permissible to ask the reasons for this determination. That God was so determined of his own free will must be enough for us.

**The Nature of the Soul.** Augustine's proof of the existence of the soul is akin to that later used by Descartes. To doubt her existence is to assert it, since to doubt we must think, and if we think we must exist. We are then thinking beings or, in other words, souls.

The soul is not material, as Tertullian had taught, but an immaterial, spiritual entity. This, as well as her immortality, is witnessed by her power to grasp eternal and immaterial essences. She is not

however pre-existent as Plato and Origen believed. With regard to her derivation, Augustine hesitates. He argues that she does not emanate from God, but, along with the material universe, is created by him. But he is uncertain whether she is derived in each particular case from the souls of the parents of the individual (traducianism) or is created directly by God and implanted by him in each new body that comes into the world. This question was discussed for some time in the Church before the doctrine of a special creation of each soul became the orthodox view.

Matter, also, created out of nothing by divine fiat, is conceived by Augustine somewhat as Aristotle conceived it. It is not primarily extended substance or body, but potentiality infused with seminal reasons which, upon the proper occasion, give effect to the Ideas in the divine mind and actualize particular sensible images. Thus every detail of the enactment of the divine plan in space and time, as well as the plan itself, is pre-conceived from all eternity.

Each soul is unique. Each one mirrors the nature of God in her possession of three faculties. Incidentally, Augustine finds everywhere triads that suggest the trinitarian character of the godhead. The soul's three faculties are intellect, will, and memory. The content of consciousness, however, all comes from without; sensible experience from the sensible world, knowledge of the intelligible order from the world of Ideas made manifest to us by the inner light vouchsafed us by God, and impressed upon us a priori quite independently of sensible experience. We do not then have to follow Plato and invoke pre-existence in order to explain our seemingly innate possession of intelligible truths. The growing, developing aspect of knowledge is due to the progressive nature of revelation on the part of God, or discovery on the part of the soul, of the truth with which he has endowed or is continually more fully endowing her.

**Knowledge and Error.** Error and uncertainty are to be explained as the results of Adam's fall and our heritage of sin from him. Because of the Fall the light of reason is obscured and we are no longer able to attain the truth by the use of our native powers. Hence the Incarnation had to take place and the truth had to be revealed visibly in Christ if the human race was to be redeemed and to be given back its lost birthright of knowledge of God.

Such knowledge is the goal not only of the intellectual but of the moral activities. In attaining it man finds his happiness and peace. His search for it reveals him as a member of the City of God. The stumbling and straying nature of that search betrays his citizenship in

the lower, opposed, earthly city and his dependence upon divine grace for enlightenment. Increase in wisdom and virtue go hand in hand. Therefore the moral life must not be regarded as a *means* to happiness (as Aristotle and the Epicureans taught). Being identical with the life enlightened by knowledge of the divine, it is an end in itself (as the Stoics taught). The aim of moral discipline is (as with Plato) to convert all love and desire into love and desire of the true good—which is God.

In connection with this opposition and conflict between a higher and a lower nature in man, Augustine constructed in his *City of God* a philosophy of human history. Man, created in the beginning sinless and placed in a terrestrial Paradise as a suitable habitat by God, fell from his high estate by his misuse of free-will. Thus sin and evil entered the world, and henceforth the human race, now expelled from Eden, was infected with original sin and justly subject to total damnation. But God, in his mercy, planned to redeem such as would accept the salvation offered them, and selected the Hebrews as the forerunners and instruments of redemption.

Mankind, however, became so utterly corrupt and lost that God destroyed it by a flood, singling out only Noah and his family for survival. Nevertheless, the descendants of Noah reverted to the ancient wickedness, save for a small number of righteous men, who, living virtuously and according to God's will in the midst of the corruption by which they were surrounded, constituted a City of God as contrasted with a City of the Devil peopled by the great mass of sinful, unregenerate humanity. Among them were numbered the great prophets and reformers of the Old Testament who rebuked the prevailing corruption of the world and bore witness to the approach of the Incarnation and the Redemption, which would hold out to all men the opportunity to turn from their wickedness and be saved.

After the coming of Christ, those who accepted him and lived according to his precepts were numbered among the redeemed and accounted citizens of the City of God. Thenceforth human history was essentially a record of a ceaseless struggle between the two cities—between the Kingdom of God and the kingdoms of this world with their pomps and vanities and seductions and their lusts of the flesh and all else that prevents mankind from accepting and following the new dispensation. The outward and visible expressions of the two cities are on the one hand the Church, the vehicle and dispenser of the divine grace and the true home of the faithful, and, on the other,

those mundane and secular and material interests and activities of mankind that oppose the living of a spiritual and Christian life.

The warfare between the City of God and the City of the Devil will continue to be the sum and substance of human history till the second coming of Christ and the Last Judgment, in which that history will culminate and end. Then, the righteous who have accepted Christ and repented their sins and walked with God will receive their just reward and live on in the celestial City of God in glory everlasting; whereas those who have rejected him and led worldly, sinful and unrepentant lives will be eternally damned and cast once and for all into hell.

**The Pelagian Heresy.** Augustine is also famous for the part he played in fighting the Pelagian heresy. Pelagius and his followers denied, like Clement of Alexandria, the doctrine of "original sin." According to this doctrine "In Adam's fall, we sinned all," and are punished by being born to a state of sin and death, physical and spiritual, from which only Christ's passion and saving grace can redeem us. To this view the Pelagians opposed the teaching that death is not a divine punishment for sin, but a natural event which has nothing to do with the Fall, and that each new human soul enters the world as sinless as Adam's before his transgression and becomes sinful only by her own act. Nay more, we can refrain from sin and preserve our pristine innocence without the aid of the Christian dispensation. Hence before Christ's coming there were men who lived without sin and attained salvation. Nor are souls of children who die unbaptized logically bound to go to hell.

These teachings were subversive of Christian orthodoxy. Among other things, they rendered the Incarnation and the Redemption unnecessary and superfluous. Augustine charged into the fray with an ardor that carried him even further than his objective—the formal condemnation of the heresy by the Council of Carthage in 411. For in fighting for original sin he asserted that God in his omniscience foresaw before the foundation of the world Adam's sin and its consequences, and therefore might be said to have elected from all eternity certain souls to be saved and others to be damned.

**Foreknowledge and Foreordination.** This argument raised the perplexing question whether foreknowledge did not necessarily involve foreordination, and made it difficult for Augustine to maintain the existence of free-will in man, whether of indeterminism or self-determination, not to speak of reconciling the omniscience and the omnipotence of God with the implications of human liberty. Immediate



controversy arose, which still agitates Christian theologians. Nearly eleven hundred years later Luther drew from Augustine his doctrine of justification by divine grace rather than by good works, and Calvin and his disciples, following the same lead, developed their doctrine of predestination.

Another question, which aroused much controversy later on, was raised by Augustine. Which is primary in God, his will or his intellect? Does the divine will decide what an intelligible and perfect being shall be like, or does God's fundamentally moral and rational nature determine what a good will shall be like? In a word, is God's character the result and expression of his will, or is his will the expression and result of his character? Tertullian had inclined to the former of these alternatives, but Augustine argues for the latter. What God wills is not good simply because he wills it. He wills it because it is good. Right and wrong are not made by divine fiat; they inspire the divine decrees. This question, which also asks whether God's freedom means self-determination or lack of any determination whatsoever, was later fought over by Thomas Aquinas and Duns Scotus. The Thomistic doctrine of self-determination has become the official view of the Catholic Church.

## VI. CHRISTIAN PHILOSOPHY FROM AUGUSTINE TO BOETHIUS

**Christian Philosophy in the West.** The death of Augustine in 430 marks the end of a creative epoch. Twenty years before, Rome had been sacked by Alaric, and twenty years later just escaped a similar fate at the hands of Attila. Another couple of decades and the last Emperor of the West was deposed, and a German mercenary reigned in his stead. Western Europe was entering the four centuries of chaos and darkness that intervened between the death of the Old World and the birth of the New.

Throughout this period the Church was the one stable and orderly institution in western Europe. She was the sole heir and repository of the ancient culture as well as of the Christian tradition, which, thanks to her, not only were implanted, as deeply as conditions permitted, in the rough and untilled but fallow soil of the new peoples, but were also conserved for posterity. She commented the philosophers and philosophies of antiquity. She codified and crystallized in anthologies and encyclopedias the knowledge of the day. She extended and strengthened the science of logic. She evolved a system of education. The work of consolidation performed throughout these centuries laid the foundation for the Scholastic movement.

**Dionysius the Areopagite.** In the East, always more inclined to speculation than the West, and thanks to the Byzantine Empire more securely entrenched against the forces of disorder and disruption, darkness did not descend so rapidly upon Christian philosophy. A full century after Augustine's death there appeared in Constantinople the works of a Christian thinker who concealed himself behind the name of Dionysius the Areopagite (a disciple of St. Paul's). These works, profoundly mystical in character and imbued with Neo-Platonism, reapplied to Christian theology the cardinal doctrines of Plotinus and Proclus—the ineffability of the One, the extension of emanation beyond the divine hypostases to the human soul and the universe, the triadic constitution of all things, and the conception of the world-process as an eternal and infinite outpouring of the divine essence and return of the divine essence to its source. Wiping out as they did the orthodox distinctions in kind between God and the created universe, they were pantheistic and heretical. But they exercised great influence upon all subsequent Christian mysticism, and helped embolden many a daring thinker to pass from orthodoxy to similar heresy. As it was, they immediately inspired another Byzantine, Maximus the Confessor, to an even more openly pantheistic interpretation of Christianity. Other eastern theologians of note, who followed a more orthodox line of thought, were John of Damascus and John Italus. They showed little originality, but did good service in codifying extant knowledge in encyclopedic form.

**Eclipse of Byzantine Philosophy.** After them the twilight engulfs also the eastern world. The Byzantine Empire was already at grips with the rising power of Mohammedanism, which was despoiling it of its richest and most civilized provinces preparatory to eventually destroying it altogether. Henceforth conditions in the East as in the West were not conducive to philosophizing. But the forces destined in the end to overthrow Constantinople and in the meantime to constitute a grave danger even to western Europe were also to render invaluable service to the development of Christian Scholasticism by their studies and translations of Aristotle and the Neo-Platonists.

#### VII. BOETHIUS

**The Consolation of Philosophy.** With the exceptions just noted, there are few names of philosophic significance to note anywhere in Christendom from the fifth to the ninth century. Best known is that of Boethius (480-524), the unfortunate minister of Theodoric,

who from the heights of political eminence was suddenly cast into prison under suspicion of treason, and eventually executed. During his imprisonment he wrote his book, *The Consolation of Philosophy*, which ranks along with the *Meditations* of Marcus Aurelius, the *Encheiridion* of Epictetus and the *Imitation of Christ* as one of the great manuals of refuge and consolation of all times. Its influence, later, was widespread and profound. Alfred the Great translated it into Anglo-Saxon. Chaucer, Lydgate, and, it is said, Elizabeth translated it into English, and it appeared in German, French, Italian, Spanish and Greek in the early years of the Renaissance.

In it Boethius relates how philosophy visited him in prison in the guise of a fair lady and consoled him for the seeming harshness of his fate. God, she pointed out, rules the world, so all must be well. If Boethius rebels against fortune, it is because he has failed to understand in what the true good and true happiness consist. They lie not in the gifts of this world, with which Boethius has been liberally blest, but in the love and knowledge of God which the world can neither give nor take away. Nor is the existence of seeming evil any bar to trust in God's supreme goodness and justice. The wicked never really flourish, for their very wickedness deprives them of the only abiding good. They destroy their true selves, and, though they seem to live and prosper, they have really suffered spiritual death. The longer they succeed in their evil ways, the more prolonged is their agony. After death they will be punished or undergo a painful purgation of their sins. Boethius may rest assured that all things happen in accordance with the divine will and the divine plan. Providence, acting through what we call fate, sees to that. Fate is the instrument through which the divine intelligence makes the divine plan operative and conforms individual events to it. The interweaving of things may seem to us confused and capricious, but in God's sight the pattern is clear and harmonious.

Finally, God's providential direction of all things through the instrumentality of fate does not deprive man of his freedom. God, to be sure, foresees all things. In his mind past, present, and future are all grasped together, and the everlastingness of the universe is seen as a single eternal event. But this foreknowledge does not imply foreordination. God's knowledge of how we shall exercise our freedom in no way constrains or influences our choice, except in so far as our consciousness that we walk ever in the sight of God may turn us from the paths of wickedness to a sober, godly, and righteous life.

**Boethius' Other Works.** Throughout his life Boethius was an enthusiastic Greek scholar, and to his translations into Latin of Aristotle's logical treatises the medieval philosophers were greatly indebted. He also wrote a number of books of his own on logic, which contributed much to the development of logical theory, and he compiled manuals on arithmetic, music, geometry, and astronomy for use in the schools. A long and thorough treatise of his on music is still a valuable source of knowledge about ancient music.

**Boethius a Christian?** Whether Boethius was ever a Christian or not is a moot point. The *Consolations* show little trace of Christian influence. But there are a number of theological tracts attributed to him, dealing with different points of Christian doctrine, which, if genuine, prove that in his younger days, at least, he was a Catholic.

**Cassiodorus.** Along with Boethius, we ought also to mention Cassiodorus. Somewhat younger than Boethius, he also held high office under Theodoric and lived to a ripe old age. His chief service lay in his great erudition and encyclopedic knowledge, and in his foundation of two monasteries dedicated specifically to the acquisition of knowledge and to the translation of the Greek authors into Latin. Incidentally he spent much money collecting manuscripts. He wrote profusely, and his treatise on the seven liberal arts, grammar, rhetoric, and dialectic, as well as music, arithmetic, geometry and astronomy played a principal part in helping organize medieval theory and practice. He had also a knack for mechanical inventions—a talent, incidentally, shared with Boethius—and occupied himself particularly with devising sun-dials and water-clocks.

The impetus he gave to the pursuit of learning was perpetuated largely through the Benedictine order which had been established at Monte Cassino near Naples some ten years before his own monasteries were founded. Indeed, it has been suggested that Cassiodorus himself joined the new brotherhood, but this is doubtful.

**Isidore of Seville and the Venerable Bede.** For the next two hundred years the Church was for the most part the graveyard of "mute inglorious Miltons"—priests and monks whose patient and industrious collection and compilation of knowledge went unrecognized. Two names, however, should perhaps be singled out. Isidore of Seville, who died in 630, left behind him an encyclopedia and a theological treatise of some merit, and early in the century in England the Venerable Bede wrote upon physics and astronomy, summarized and commented the writings of Augustine, Jerome, and Isidore, and composed his *Ecclesiastical History of the English Nation*.

## Chapter XXIV

# EARLY MEDIEVAL PHILOSOPHY

### I. PHILOSOPHIC EQUIPMENT OF THE TIMES

The Middle Ages are commonly dated from the end of the eighth and the beginning of the ninth centuries, and an Englishman, Alcuin, is regarded by some as the first of the distinctively medieval philosophers. However, before turning to the new outburst of philosophic activity, let us pause a moment and cast an eye over the materials collected in previous centuries for its use. We may note in the first place that ability to read Greek was almost extinct and that the medieval world had to depend upon Latin translations for its knowledge of the Greek originals. In translation there existed a portion of the *Timaeus*, done by Chalcidius, and scattered fragments of the other dialogues of Plato, most of which, if known at all, were known by title only. But Chalcidius' commentary gave also some idea of pre-Socratic teaching and some of the doctrines of Aristotle and of the Stoics and Neo-Platonists. Of Aristotle's works, only the logical treatises *De Interpretatione* and the *Categories* were known in translation, supplemented by Porphyry's *Introduction to the Categories*, which, as has already been remarked in discussing Porphyry, had great influence upon medieval thought. Generally speaking, then, Aristotle was known only as a logician, and as such incompletely.

Of the Roman philosophers, some works or fragments of Cicero, Seneca, and Lucretius were at hand, as well as a few late Latin commentaries and treatises dealing with Porphyry, the Neo-Platonists, and the Hermetic writings. Some of the Greek Fathers were also known in translation, and the works of Augustine and the pseudo-Dionysius exercised great influence. But above all, scholars turned to the more recent compilations of Boethius and Cassiodorus.

Such was the mental equipment that philosophy found at hand in the ninth and tenth centuries. Little was added to it in the next two hundred years, except further portions of Aristotle's *Organon* and some scattered Latin renderings of Byzantine and Arabian thinkers, as well as the medical writings of Galen and Hippocrates.

A glance at the political set-up of the new era may also not be amiss. The coronation of Charlemagne as Roman Emperor in 800 celebrated the emergence of order out of confusion and the laying of the foundations of modern continental Europe. In England, also, some consolidation of the warring Saxon kingdoms had taken place, and, in spite of the ravages of the Danes, the eventual unification of all Britain under Edward, son of Alfred the Great, was to take place in another hundred years.

## II. ALCUIN AND RHABAN MAURUS

There is little sign in Alcuin of the reawakening of philosophic speculation. If he is the first of the medievalists, it is largely because he happened to be born a contemporary of Charlemagne. His chief claim to fame lies in the field of education. Charlemagne, alarmed and distressed at the lamentable illiteracy of the French clergy, and unable to recruit teachers and organizers from France itself, imported him, along with other scholars from England and Italy, to help found institutions of learning and to devise an educational system in and under which clerics might be trained. It is to Alcuin that we owe the final classifications of the so-called seven liberal arts into the *Quadrivium* of arithmetic, geometry, astronomy, music (and medicine), and the *Trivium* of grammar, rhetoric, and dialectic, and their introduction into the schools as the basis of a liberal education. This system prevailed for the next five hundred years and fell into disuse only with the coming of the Renaissance.

In the next generation Rhaban Maurus, among others, carried on Alcuin's work. He wrote an encyclopedic survey of extant knowledge, divided philosophy into two parts, according as it was concerned with earthly or heavenly things, and approached the problem of education in a broad-minded and humanistic spirit. He also denounced the extreme form in which the Augustinian doctrine of predestination was being revived at the time by the abbot Gottschalk. In his attack upon this doctrine he was joined by another monk, Hincmar, whose argument has come down to us. God, said Gottschalk, not only desires that some souls shall be saved; he *wishes* that others shall be damned. No, replied Hincmar, God desires that *all* men shall be saved. In Christ he has offered them salvation. Those who are damned are damned because they deserve to be. As the result of their labors two synods in succession condemned the doctrine of double predestination.

## III. JOHN SCOTUS ERIUGENA

The first original thinker of the Middle Ages is John Scotus Eriugena. Born and educated in Ireland, whose monasteries were at that time famous for their learning, he followed the drift of scholars to Paris (about 847) where his unusual learning and his wit quickly won for him a great reputation. He knew Greek, and perhaps Arabic, as well as Latin, and was well acquainted with the Greek Fathers and with the Neo-Platonists. But his mind was too restless to be confined within the limits of orthodoxy. Incited by Hincmar to join in the attack on the doctrine of double predestination, he showed in his discussion of the subject symptoms of the unorthodox doctrine that later was to procure his own condemnation.

**Plotinian Interpretation of Christianity.** In his philosophy, Eriugena returns to the Plotinian doctrine of emanation with all its pantheistic implications which had been repeated by the Neo-Platonists and the pseudo-Dionysius. The universe and the human soul are not created out of nothing by divine fiat. When we hear that God made the world, we should understand it to mean that God is in all things and is the ground of their being. All things proceed from him, and all things express his nature.

**Four Stages of Divine Unfolding.** In this divine unfolding four stages may be distinguished. We start with *the nature that is uncreated but creates*. This is the center, the essence, and the source of all things. It is beyond all the categories of finite experience, and is indescribable by any terms at our command. It is too high even to be conscious of itself and have knowledge of itself, since consciousness and knowledge make sense only under finite conditions. For example, if God knew himself he would have to think of himself under the categories that knowledge implies, and, among other things, would have to classify himself, since knowledge implies classification, as one among a number of other members of the same genus, that is, as one among many Gods.

But this Being, although absolutely transcendent, contains within itself the infinite possibilities of all existence, which it proceeds to actualize. It now both generates and knows form, and thus becomes a divine mind enshrining the intelligible structure of the universe, the second person of the Trinity, the Son, *the nature that both is created and creates*. This nature goes on, in the procession of the third person of the Trinity, to make manifest the form or intelligible structure of

the universe in which God first becomes conscious of himself and knows himself. This manifestation is *the nature that is created but does not create*—the world of individual things, corporeal and spiritual, unfolded by the world-process in time and space. Hence the universe, also, is an emanation from the divine substance and consubstantial with the Father. In creating it God is creating himself.

Finally, having exhausted all the possibilities of existence and thus reached the limits of self-expression, God turns back to himself and re-enters into himself. Just as at the beginning of the cycle he was *the nature that is not created and creates*, so, as the journey's end in which he rests after his long voyaging, he is to himself and to us who are part of him and of his striving, *the nature that neither creates nor is created*.

**Incarnation and Redemption.** Man, even as he is put forth from God, may return to God and lose himself in the ineffable essence of the divine. Herein his salvation lies. Of this cycle of creation and salvation the historic Incarnation and Redemption are the local and temporal manifestations, and in their benefits not only man but the whole creation shares. As the eternal Logos, the Son, is the agent through which the universe is put forth from God, so Christ, its manifestation in space and time, is the way by which all things return to and are reunited with him.

Man, being free, interfered with the completion of the cycle, and from this his fall and all its consequences resulted. A long and gradual ascent is the condition of his salvation. Death frees him from the gross flesh with which the Fall has endowed him; the resurrection of the body restores to him his corporeal nature in its original incorruptible form. Little by little, this body may be transformed into spirit, and man may become a mind pure and simple contemplating the truth. And finally the soul may make the mystic flight, passing away into God as air shimmers away into light, yet it would seem in some way preserving her identity, though identified with him.

**Reason the Criterion of True Revelation.** In the matter of faith *vs.* reason, Eriugena ranges himself with the Alexandrian Fathers on the side of reason. Indeed, his system is in a way an attempt to rationalize Christian doctrine. Revelation, he feels, cannot antagonize reason, since it is the revelation of truth, and truth must be reasonable. Philosophical and religious truth are one and the same thing. Scripture is to be interpreted by the use of reason and in terms acceptable to reason. How much more, then, is reason to be used in dealing with the interpretations given Scripture by the Fathers of the Church! Their pro-



nouncements have no authority except in so far as they are reasoned and reasonable. The only authority is that of truth, and the truth about God and the universe can only be discovered by rational thinking and founded on rational grounds.

This interpretation of Christian doctrine, championed by Eriugena, was destined to persist in spite of all efforts to suppress it. But its course was largely underground, with sporadic reappearances from time to time, till finally it gushed forth again some four hundred years later in the German mystic, Meister Eckhart.

## Chapter XXV

# THE QUESTION OF UNIVERSALS

### I. THE REAPPEARANCE OF THE PROBLEM OF UNIVERSALS

With the death of Eriugena about 877 Christian philosophy again relapsed into a silence that lasted for nearly two centuries. Meantime, however, a problem suggested by Porphyry's introduction to Aristotle's *Categories* was beginning to worm its way to the front. Porphyry, in commenting on the *Categories*, had raised again the question of the nature and status of *Universals*, or general concepts and essences such as "animal," "mankind," "justice," "redness," "squareness," and the like. But this question he had left wide open. "Now," he says, "concerning genera and species, whether they be substances or mere concepts of the mind; and, if substances, whether they be corporeal or incorporeal, and whether they exist apart from sensible things, or in and about sensible things, all this I will decline to say."<sup>1</sup>

**The Problem Raised by the Sophists.** We may note that in this sentence Porphyry re-states the problem that had so agitated Socrates, the Cynics, the Cyrenaics, Plato, and Aristotle. It had been raised in Greek philosophy, we may remember, by the assertion of the Sophists that each man was the measure of his own truth, and, by implication, of his own good, and that therefore there was no such thing as universal and absolute truth and right. Callicles and Thrasymachus had applied this view to the field of politics and ethics. The former had asserted that the stronger have a natural right to rule and to impose their will upon the weaker; the latter had maintained that right and wrong, justice and injustice are purely arbitrary and conventional affairs reflecting only the whims of those who happen to be in power, and hence that they are reversible by legislation.

**The Socratic Universals.** Socrates had attacked the Sophists' teaching, and had tried to prove that there is such a thing as absolute and universal right and wrong. Justice, he said, and temperance and virtue

<sup>1</sup> Trans. Rickaby, *Scholasticism*, pp. 2, 3.

exist in and for themselves and are what they are quite independently of the diverse and fluctuating opinions of different individuals regarding what is just and temperate and right. For that matter, they really already exist in the minds of all men beneath the apparent diversity of individual opinions, since these opinions, if sufficiently analyzed, will be found to converge upon and eventually reveal a definition upon which all men, in all times and places, will agree.

**The Platonic Ideas.** Plato had then taken these Socratic Universals, had expanded them beyond the realm of ethics to include general natures and essences of all sorts, and had made ultimate Realities of them, far more real than the concrete, particular things that embodied them. Indeed, he conceived these Universals, or Ideas, as possessing an existence of their own apart from and independent of both the sensible objects that enacted and the minds that entertained them.

**Universals Attacked.** The Platonic view, however, was opposed by both the Cynics and the Cyrenaics, who maintained that so-called "Universals" were nothing but the impressions of similarity which individual things made upon our minds, and that therefore they did not represent anything existing outside our minds, in or apart from particular things. Indeed, the Cyrenaics went so far as to affirm that, since we had no direct acquaintance with one another's sensations and thoughts, we could never be sure that different individuals were impressed by external objects in the same way. I, for example, could not be certain that what I called a "red" object gave you the same color sensation as it gave me, or that the characteristics that in my eyes distinguished a "human" being from all other classes of beings were like those that you regarded as distinctive properties of the human species. Hence, they argued, not only were Socratic Universals and Platonic Ideas non-existent outside of individual minds, but we could have no assurance even that they existed in the mind as concepts having the same significance for a plurality of individuals.

**The Aristotelian Forms.** Again, Aristotle had also attacked the Platonic Ideas, denying that Universal types and natures existed in themselves apart from particular things. Only what is individual and concrete, he said, has substantial existence. However, Universal Forms were not merely impressions of similarity made by particular, concrete substances upon our intellects. They were *really* an integral part of the substance which determined and distinguished its species or genus. Every concrete thing is some species, or kind, of thing, and is united to all other things of the same class by the real possession of one and the same Form. This Form exists not only in our minds as a general

concept. It exists also in all the individuals subsumed under the class-concept in question, as a real nature or essence common to them all.

**Later Graeco-Roman and Early Christian Views.** In later Greek, and in Graeco-Roman, philosophy the problem of Universals retreated into the background. What view one took of their status was largely inherited from Plato and Aristotle, or from the skepticism of the Sophists, Cynics, and Cyrenaics. Early Christian philosophers, influenced as they were by Plato and the Neo-Platonists, assumed an "ultra-realistic" position with regard to the status and significance of general concepts. They believed that Universals were real metaphysical entities existing in and for themselves independently both of the minds that conceived them and the concrete, particular objects that embodied them. But, unlike Plato, they believed that these entities were not uncreated and self-existent, but owed their being to God.

To be sure, some doubt had been cast upon the Platonic substantiality and independent existence of Universals by both Augustine and Boethius, who had spoken of them as potentialities which assumed actual and substantial form only in concrete, particular objects. But the question of their nature had not become, as it was now to become, a matter of bitter controversy which took precedence for the time being over all other philosophic problems. This controversy was precipitated in the last part of the eleventh century by Roscellinus' violent attack upon the ultra-realists' position.

## II. ROSCELLINUS

**Roscellinus' View of Universals.** Roscellinus (circ. 1050-1122) was a canon and teacher at Compiègne. Universals, he flatly declared, far from being substances existing in and for themselves, as the ultra-realists maintained, had no being outside our minds. They did not even *exist* in particular objects. For all real existence and substantiality are individual and concrete in character. However, particular substances impress the mind as similar to one another, and their similarities appear to be common characteristics in which they share. In this way we come to *classify* objects and to subsume them under types, and to use generic and general names like "redness" or "mankind." But a *name* is merely a *word*, and a word, as Boethius had already pointed out, is merely a movement of the air produced by the tongue. Hence, Universals turn out to be nothing but *flatus vocis*—vocal sounds standing for and summarizing the similar aspects and properties of individual substances.

In short, in the language of the Medieval Schoolmen, or Scholastics, Universals exist neither *ante res* (prior to individual things) nor *in rebus* (in and as part of individual things). They exist only *post res* (in derivation from and posterior to individual things).

**Nominalism Defined.** The term nominalism has been used by some historians of philosophy to describe Roscellinus' teaching. But by others it is considered a misnomer. The term, the latter feel, is properly applied only to the doctrine, later advanced, that really *universal* and *general* concepts do not exist even *in* the mind. The intellect, according to this doctrine, is incapable of thinking without imagery, and always has to *picture* a so-called abstract and universal idea in a vague and undetailed, but nevertheless particular and concrete, sensible instance of the genus or species in question. The universal and common character of this image lies simply in the fact that it is a kind of composite photograph of many similar percepts, and is used by the mind to symbolize and stand for all of them.

**Roscellinus a Realist.** There is, however, no sure ground for attributing such teaching to Roscellinus. He seems rather to have believed that the mind can really abstract and contemplate in a purely *general* way the *common features* of particulars without *picturing* to itself in a specific and sensible image the common feature in question. We can, for example, *conceive* redness without *seeing red*, and entertain a general idea of mankind without the name's conjuring up before our eyes some vague and composite but particular image of a human being. *Universals* then *really* exist as such *in* our minds, although they do not exist outside them, either in themselves or in individual objects. Hence, it is argued, Roscellinus is more properly classified as a *realist*, though as a realist of an attenuated and very "moderate" sort.

The theological implications of this doctrine were at once perceived, and threw the medieval world into an uproar. The one, identical substance and godhead of the Trinity tended to dissolve into a superficial unity, existent only in our minds, of three really distinct and separate divine substances, united only by the similarity of their natures and of their power and will. The term "hypostasis," with which the Latins had equated the term "person," was, Roscellinus declared, also equivalent to *substantia*, or "substance." Hence, since all substance is individual in character, the three persons of the Trinity must be three distinct and separate substances, or, in other words, three distinct and separate Gods. To maintain that they are one substance

was to confuse the persons and to deny any *real* difference between Father, Son, and Holy Ghost.

Roscellinus was promptly haled before the Council of Soissons in 1092, charged with teaching that there are three Gods instead of one, and forced to recant his heresy.

### III. ANSELM

**Common Nature of Objects.** Among the bitterest opponents of Roscellinus was Anselm, Archbishop of Canterbury and a theologian and philosopher of high attainments (1035-1109). He accused Roscellinus of tritheism, and, bred as he was in the Neo-Platonic and Augustinian tradition, he maintained that our general concepts were of real universal essences and natures existing outside our minds. Roscellinus, he argued, failed to see that the resemblances between individual substances, which gave rise to universal ideas in the mind, were themselves due to the participation of these substances in universal essences, like mankind, triangularity, redness, etc., whose presence in them constituted their similarity and made them instances of one and the same class or genus. Different individual objects could not *look* alike, unless they *really were* alike. And they could not really be alike unless they possessed an identical nature in common.

Moreover, every *particular* substance is as truly and profoundly some *sort* of substance, endowed with a *universal* nature which it shares with other particulars of the same sort, as it is a distinct, particular thing existing apart from all other things of the same class. Substance is, then, a union of the universal and the particular, both of which are equally essential to its existence.

Theologically this conjunction of universality and individuality in substances means that the three individual persons of the Trinity, each one of which is God, are nevertheless one God, not three Gods. Though distinct from one another, they at the same time share, exemplify, and individuate one and the same Divine Nature. This single godhead is equally present in them all, and is as integral a part of each of the three divine persons as are the distinct individualities that make one the Father, another the Son, and the third the Holy Ghost.

**Universals as Archetypes in the Divine Mind.** Finally, Universals exist not only as general concepts in our minds but also outside our minds, as the common natures of individual substances. They also exist from all eternity, prior to both human minds and particular objects, in the divine intellect, as components of the general plan and Idea of the

universe which God had in mind before he put that Idea into effect by creating the world of particular substances embodying it. First, the universe existed as God's unspoken, then as his spoken, word. The unspoken word, the system of Universals which forms the content of the divine mind and constitutes God's knowledge of himself, is the Logos, or Son, who is both the archetype and the agent of creation.

**Faith and Reason.** Anselm also devoted much time and thought to the problem of the relations between faith and reason. The two, he felt, are not antagonistic but one at heart. We must, he felt, have faith in the Christian verities before we can begin to understand them, and this faith is not dependent upon prior reasoning about them. The veracity of the content of revelation is not something to be established or rejected on rational grounds. "I do not," he says, "desire to know in order that I may believe." Rather, he continues, "I believe in order that I may know." Nevertheless, believing does not mean that we should not also seek to understand what we believe. It is the business of reason to show, as far as it can, that faith is reasonable, and by so doing to reinforce the claim of revelation to truth. Reason, however, must not criticize Christian doctrine. When it comes upon something revealed that passes understanding, then its proper course is not to doubt but to hold its peace and accept the truth on faith.

**Proofs of the Existence of God.** Having thus justified the use of reason in dealing with revelation, Anselm proceeds in his *Monologium* to probe with it even the most recondite of the mysteries of faith. We not only know by revelation that God exists. Dialectic also proves the fact. In the first place, the moral life is a search for goods of one sort or another, and of different degrees of goodness. But, differ as they may in kind and in degree, they owe their desirability to a common quality of goodness in itself, resident in them all. In order, then, that we should find anything good, there must exist an absolute and sovereign goodness or perfection.

Again, attacking the subject from another angle, all beings have a common quality of existence. To say that all beings are self-existent is to make them all share in a common capacity for self-existence to which they owe their several beings. To say that they endow each other with existence, or, in other words, are the causes of the things of which they are the effects and *vice versa*, is palpably absurd. Therefore, there can be only a single cause or ground of being from which all things derive their existence.

Finally, the idea of the higher and the lower, the more and the less complete and perfect in nature, forces us to one of two conclusions.

Either we must go on and on to infinity in an endless and fruitless search for that which is most high and absolutely perfect and complete, or we must admit that such an absolutely complete and perfect being exists. The first alternative is absurd. Hence we are logically compelled to accept the existence of such a being—that is, of God.

**Gaunilo's Objections.** This argument was at once attacked by Gaunilo. Anselm's arguments, he pointed out, *may* indeed necessarily lead to the *idea* of a single, complete, perfect being as the ground and cause of the universe. But they do not necessarily force us to the conclusion that this idea has its counterpart in the objective world. If it did, we could just as well argue the existence of a perfect island somewhere out in the middle of the ocean from the fact that we can imagine such an island to exist. In short, the *idea* of a perfect being does not necessarily imply the *existence* of a perfect being.

To Gaunilo, Anselm replied to his own satisfaction in his *Liber Apologeticus*. But the honors remained with his opponent. Anselm's so-called "ontological argument" was rejected by most of the later scholastics, including Thomas Aquinas.

**The Nature of God.** Having logically proved, as he thought, that God exists, Anselm turned the light of reason upon the divine nature. But thus directed and focused, the light failed wholly to illumine it, and revealed shadows which Anselm recognized but could not dispel. At first, to be sure, things seemed clear enough. The character of the less perfect indicates the nature of the more perfect. Therefore God will possess completely the qualities inferior beings possess incompletely, and hence will be spirit rather than body, and a spirit perfectly wise and powerful and good. These qualities, however, are not attributes of God, detachable so to speak from his being. They are the substance of God—are God himself.

At this point the trouble begins. A substance is nothing without attributes. Unqualified, it becomes vacuous. If, then, God has no attributes, but only substance, paradoxically enough he cannot be a substance. Again, how can a being conceived as simple and single be also conceived as spread through all space and time? How, if he is not in space and time, and therefore exists nowhere and at no time, can he be conceived as existing at all? He must, then, somehow exist both in and out of space and time. Or again, take the Trinity. Here, too, reason runs into insurmountable contradictions and difficulties. By and large, Anselm found himself obliged to confess that the nature of God is ineffable and transcends all the categories of human experience, including even knowledge and being. All our attempts to



describe the divine nature are at the best but poor approximations of the truth.

So far as the creation of the universe is concerned, Anselm accents the orthodox doctrine that it was called into being out of nothing by divine fiat. To derive matter from God and to regard the universe as an emanation of the divine substance are to conceive the world as a deterioration of the godhead and the godhead, therefore, as a being susceptible of corruption. The only way, then, in which a perfect being can give rise to a universe is by simply willing it to exist.

**Incarnation and Redemption.** In his treatise, *Why God Became Man*, Anselm seeks to explain Incarnation and Redemption. Adam's misuse of free will and consequent sin and fall, in which the whole human race is involved, constituted an act of willful disobedience to God, and therefore logically necessitated a punishment that God, however merciful his inclinations, could not withhold without ceasing to be just. But a just punishment for willful disobedience to the supreme will must itself, by the logic of the case, be supreme. The honor of God, then, could be satisfied only by the extinction or damnation of the whole race. Such a course, however, would defeat the object for which God created the world—to secure the happiness of man. The logic of this situation offered and demanded but one method of escape. Nothing that finite man could do could atone for his sin against the infinite. But God, being infinite, could, if he substituted himself for man and suffered in man's stead, give himself the infinite satisfaction his honor demanded and thus atone for man's sin. This he did in the Incarnation and Redemption. God's suffering in Christ acquired for God an infinite merit demanding logically an infinite reward, which, since God had no need of it, he transferred to man's credit and thus made his salvation possible.

#### IV. WILLIAM OF CHAMPEAUX

Now that the theological importance of the question of Universals was realized, the fat of the controversy over their nature was in the fire, and William of Champeaux added fuel to the flames by an attack upon Roscellinus, the fury of which carried its author to the extreme assertion that the universal alone has real existence, that it is wholly and exhaustively present in each particular example of itself, and that the individuality of these examples is nothing but an accidental variation of the generic essence. The difference between you and me, for example, is only skin deep. Underneath the skin we are

one and the same human being. This doctrine proved to be as heretical as the teaching of Roscellinus. Its implication was to revive the ancient Sabellian heresy that the three persons of the Trinity are merely three unessential modifications or aspects of the essentially unitarian nature of the godhead.

#### V. ABELARD

Both the extremely individualistic form of realism advocated by Roscellinus and the Platonic ultra-realism of William of Champeaux were called to account by Abelard (1079-1142), whose love-affair in his maturity with Héloïse, and life-long devotion to and correspondence with her after both had adopted the religious habit, have made him a great figure in the history of romance as well as of philosophy. He had been a pupil of both William of Champeaux and Roscellinus, but he could agree with the conclusions of neither of his masters.

**Nature of Substance.** Against William he reasserted the individual and concrete nature of substance, and denied that particular objects could be reduced to mere instances of universal types and Forms, to which they owed all the *reality* they possessed. On the contrary, over and above their generic natures as *kinds* of objects, they also, he maintained, possess a *real* individuality which makes each particular thing a substance in its own right, distinct from all other instances of the same universal class.

But with the extreme individualism of his other teacher, Roscellinus, Abelard was equally impatient. To be sure, Universals were not themselves substances as the ultra-realists maintained. But, on the other hand, they were not mere names we used to designate resemblances between individual things. When we predicated one and the same particular name of a number of individual objects, we gave to that particular word a generic significance indicating the concept of a class or genus to which we asserted the objects in question *really* belonged. We could not do this, however, unless the common natures we were predicating of them *really* existed. It would make no sense, for example, to state that Tom, Dick, and Harry are all *men*, unless there was actually such a thing as *man-kind*.

In other words, we could not *predicate* common properties of particular substances unless these properties were already really there *in* the substances in question, and were really possessed by them. Indeed, we could not have any common names in our speech, or general concepts in our thinking, if in the external world there were no such things as common and universal characteristics.

**Nature of Universals.** But Abelard went still further. He felt with Anselm that Universals exist even apart from and prior to their particular instances, as well as independently of the human minds that entertain them as general ideas. They constitute the Form of the universe as it is conceived by the intellect of God, and are the patterns after which individual substances are created, and because of which these substances are the *kinds* of things they are.

To sum up in the terminology of the day used by Abelard, Universals exist at the same time *ante res* (as Ideas in the divine intellect), *in rebus* (as the common natures shared by individual substances) and *post res* (as the general concepts formed by human minds).

**Abelard a Moderate Realist.** This doctrine, which took a middle course between the extreme positions of William of Champeaux and Roscellinus is sometimes called *conceptualism*. But conceptualism, like nominalism, is now regarded by many historians of philosophy as a term more properly applied to later teaching, and Abelard is classified by them as a moderate realist—much more “moderate,” needless to say, than Roscellinus. His view was later adopted, with some modifications, by Thomas Aquinas, and in the final form given it by the latter has become part of the philosophy accepted and promulgated today by the Catholic Church. But before it was given final shape, the nature and status of Universals continued to be a subject of spirited and bitter debate. To these further developments of the controversy we shall return in a moment.

Abelard's attitude towards philosophical and theological questions, like his doctrine of Universals, was moderate and liberal. He accepted revelation because he considered it in accordance with reason, and insisted that we should *believe* only what can be defended and supported on rational grounds. It was the business of philosophy to undertake such a defense and to make Christian doctrine intelligible. But to do so philosophy had to have a free hand in criticizing theology and in rejecting beliefs that it found contrary to reason.

**Christianity a Way of Life.** Of other religions than Christianity, Abelard was tolerant. He felt that Greek philosophers, like Socrates and Plato, of whom, to be sure, his age had scanty knowledge, were inspired, and that Christianity was the culmination of a double process of revelation Hellenic as well as Hebrew. He also thought that what entitled a man to be called a Christian was adherence not so much to the dogmas of the Church as to the moral precepts preached and practiced by Christ. Hence, men who lived before Jesus himself had

appeared were nevertheless, in a sense, already Christians if they had followed the way of life he was later to expound and exemplify. Nearly two centuries later, Dante expressed much the same view in the *Divine Comedy*, and admitted the Emperor Trajan to Paradise on the ground that although he was a pagan he was a Christian at heart.

**Morality and Conscience.** Under the title *Know Thyself*, Abelard wrote an ethical treatise in which he maintained that the morality or immorality of an act has little or nothing to do with either the nature and consequences of the act itself or the thoughts and desires by which it is prompted. It is good or evil solely as it is well or ill *intended*. If ill intended, it is sinful; if well intended, it is not, whatever its objective character and subjective motivation. But he is careful to point out that there must be a standard of some sort for judging whether *intentions* are good or bad. Otherwise, anyone could excuse any act by pleading that his intentions were of the best.

This standard Abelard finds in a natural law of morality manifested in the *conscience* possessed by every man, and founded upon the will of God. To be sure, individual interpretations of this law may differ, and the conscience of one man may permit or prohibit behavior that the conscience of another does not. When such differences exist each individual must obey his own conscience, and can rest assured within himself that, if he has honestly done so, he has not sinned but has acted in accordance with the divine will. Conversely, anything a man does that is against his own conscience is sinful, no matter how much his act may commend itself to the consciences of others.

**Effects of Abelard's Teaching.** Abelard's view of the nature of Universals was ably seconded in the twelfth century by Hugo of St. Victor, Gilbert de la Porrée, Alan of Lille, and John of Salisbury, the last of whom was a liberal educator, a historian of philosophy, and an able psychologist, as well as a theologian. But it had to undergo further forging in the fires of controversy and tempering by a more complete knowledge of Aristotle before it finally crystallized in the teaching of Aquinas. One of its immediate effects, however, was the conversion of William of Champeaux from his ultra-realism. He did not, however, accept Abelard's own views, but became an *indifferentist*, and, indeed so extreme an indifferentist that he almost landed in the camp of Roscellinus.

## VI. INDIFFERENTISM

The "indifferentist" theory of the nature of Universals, like the doctrine of Abelard, was an attempt to find a middle path between the ultra-realists on the one hand and Roscellinus on the other. It had a great vogue in the twelfth century, and was developed and championed by the Englishman, Adelard of Bath; the Fleming, Walter of Montaigne; and William of Champeaux, after his conversion from ultra-realism.

The "indifferentists" agreed with Roscellinus that substance is individual and concrete in character, but against him they argued that each individual substance possesses *essentially* properties that it possesses *in common* with other individuals. I, for example, am *essentially* a distinct, particular, unique human being not to be confused with any other man. But I am just as essentially one man among others, undifferentiated from them so far as my *humanity* is concerned. Common properties, then, signify a real *non-difference*, or similarity, between individual substances, which is as much a part of their substance as is their difference from one another.

These respects in which particular objects are alike constitute *genera* and *species*, and are not modified by the distinctive characteristics of the individual. They are present without differentiation, or *indifferently*, in each of their particular instances. They really exist then *in rebus*, and not merely, as Roscellinus had taught, *post res*. But they do not exist, as Abelard maintained, *ante res*. Outside of our minds, they are located only *in* individual substances, and are no more than properties *of* individual substances.

William of Champeaux, however, in the zeal of his conversion from the ultra-realistic point of view, pushed *indifferentism* to an extreme that verged on the individualism of Roscellinus. Like other *indifferentists*, he taught that it is part of the essence of an individual substance to be like other substances in some respects, and that therefore Universals exist *in rebus* as well as *post res*. But he denied that common natures or properties exist without difference in different things. For example, two objects have a common property of *blueness*. It is part of the essential nature of them both to be like each other in this respect. But the blueness of the one is not the blueness of the other. It is the blueness of that one particular object and of no other object. Blueness is not then present altogether without difference, or *indif-*

*ferently*, in the two things. In the one case the "common" property is solely a property of *this* individual substance, in the other of *that*.

#### VII. NEW HERESIES

Meantime the Platonic realists were by no means discomforted, but if anything spurred on to new efforts. In the persons of Bernard and Thierry of Chartres they stoutly defended the extreme thesis that William of Champeaux had abandoned. Indeed, Thierry carried things so far as to verge on pantheism. Bernard accused Abelard of partitioning the godhead among the three persons of the Trinity, and Gilbert of applying an "indifferentism" to it that substituted similarity for identity. He argued with such effect that he succeeded in having their views condemned as heretical.

**Pantheism.** Such condemnations were inevitable. The Church was now in a state of intellectual ferment not unlike that which marked its first formative centuries, and a crop of new heresies, not to speak of some that were perennial, were bound to spring up. Among the latter we may note a persistent tendency towards pantheism fostered both by the intellectual dispute between the different kinds of realists and by frequent outbursts of mystic emotion. Nor should we overlook the curious mixture of Manichaeism and materialism revived in the twelfth century by the Catharists and the Albigenses, against whom Alan of Lille defended at length the immaterial, simple, and immortal nature of the soul with a zeal that ranks him with John of Salisbury as one of the first medieval psychologists.

But Alan, for all his denunciation of the Albigensian heresy, was himself in danger of pantheism, since in his teachings he moved towards a theory of the interpretation of God and the universe which verged on a derivation of the world from the divine substance.

At Chartres the pantheistic tendencies of Thierry became explicit in Bernard of Tours, who, returning to the Plotinian doctrine of emanation, regarded the universe as an offshoot of God. His pupil, William of Conches, was not quite so bold, but went so far as to identify the Holy Ghost with the Platonic world-soul, and, in the realistic tradition of the school, to reduce individual souls to aspects or modifications of it. Amalric of Bena, under the influence of Chartres, taught that all things are God, and that God is everything. In Belgium, David of Dinant maintained that matter, spirit, and God are identical at heart. Their teachings had an insidious and widespread influence. They became, for example, linked with a quasi-Adventist

movement that expected every human being to turn into the Holy Ghost in the year 1210, and with the preaching by Joachim of Flora, in his so-called "eternal gospel," that the old dispensation was presided over by the Father, the present dispensation by the Son, and that a new order was imminent in which the Holy Ghost was to reign supreme.

**The Inquisition.** These heresies met with immediate rebuff from the Church. Unable to refute them by philosophic argument or to intimidate them by threat of excommunication, she resorted to stronger measures and for the first time invoked and received the aid of the civil authorities in a campaign of physical extirpation. Hitherto, heresy had been a purely ecclesiastical misdemeanor, subject only to spiritual correction, save for sporadic persecution at the hands of pious princes or mobs. In the twelfth century, however, heresy became a criminal offense punishable under civil law by death, on the theory promulgated by Pope Innocent III that treason to the Christian God was treason to the State. Burning at the stake, rare in the past, now became the recognized penalty for questioning the authority of the Church. Nay more, not content with taking cognizance of such cases as were brought to her notice, the Church commissioned the mendicant Orders, and particularly the Dominicans, with the duty of ferreting out heresy and reporting any suspects they might detect. Thus in the middle of the thirteenth century, the Inquisition was well established.

#### VIII. MYSTICISM VS. DIALECTICS

Meantime, the monastery of St. Victor at Paris was nurturing mystical tendencies, which, however, like the mysticism of Augustine, succeeded in keeping within the bounds of orthodoxy. The love of God, it was admitted, could never fuse us with him or destroy the limitations of our finite natures. Nor could it circumvent the discipline through which alone, aided by divine grace, the soul could advance step by step to realization of her beatific vision.

But the fires of untamed and consummated ecstasy, though banked, apparently continued to smolder, and found vent in a contempt for the dialectical hair-splitting to which the philosophers of the period were given, and even in a disparagement of serious metaphysical and theological speculation. Among the mystics of St. Victor we must number Hugo, with whom we are already familiar, and Richard, and more especially Walter who regarded philosophy and secular learning

as a menace to Christianity and accused theologians of light-mindedness in their treatment of the ineffable mysteries of faith.

Among those he attacked was Peter Lombard whose *Sentences* contain a typical list of the questions with which philosophers were concerning themselves. Some of them are profound, as, for example, the query whether a God who foresees that he will create is not eternally determined to create; others, like the question why Eve was created from Adam's rib rather than some other part of his body, and why in the Incarnation God became man rather than woman, are trivial.



## Chapter XXVI

# THE ARABIAN AND JEWISH COMMENTATORS

### I. MOHAMMEDAN KNOWLEDGE OF PLATO AND ARISTOTLE

Curiously enough, considering the Church's later acceptance of Aristotle as her official philosopher and of her adaptation of his teaching to her needs, the dangers arising from philosophic speculation were at first laid at his door, and his teaching and influence were regarded as pernicious. Indeed, the heretical utterances of David of Dinant were directly attributed to acquaintance with Aristotle's *Physics*. Let us, then, turn back for a moment and see how and when the Church gained her first knowledge of the Aristotelian philosophy.

**Translation of Plato and Aristotle into Arabic.** By the end of the fifth century much of Aristotle as well as some of Plato had been translated from the original Greek into Armenian and Persian, and the *Organon* and considerable Neo-Platonic material subsequently became available in Syriac. This material was passed on in the eighth century to the Mohammedan Caliphate at Bagdad, where its appearance in Arabic incited Arabian scholars not only to translate all the most important works of Aristotle, but to extend their knowledge of the Neo-Platonists. From Bagdad the ancient philosophers in Arabian guise accompanied the Mohammedans to Spain.

While, then, Christian philosophy was almost entirely in the dark as to Aristotle except for an acquaintance with his logic, the Mohammedans were basking in his light, and it was largely from them, through Latin translations of the Arabic translations, that twelfth century Christian thinkers were introduced to the Aristotelian metaphysics, physics, psychology and ethics. Some acquaintance, to be sure, came at first hand through the comments and direct translations of men like Grosseteste, professor at Paris and Oxford and later bishop of Lincoln, and John of Basingstoke. But for the most part it was to the collective labors of the groups of translators from the Arabic at Toledo and at the courts of Manfred and Frederick II in Sicily that the new knowledge of antiquity was acquired. To the results of their

work we ought also to add Hebrew renderings of the Arabic made in the thirteenth century.

For the Arabs Aristotle had great fascination. But it must be remembered that their knowledge of him was only one degree less direct than the acquaintance they were to transmit to Europe, received as it was through the Syriac, and sometimes through Syriac and Hebrew. So their translations were bound to be garbled. Furthermore, they read him frequently in the colored light of commentators like Alexander of Aphrodisias and under the spell of the Neo-Platonic philosophers with whom they were already acquainted. These last led them to interpret the Aristotelian doctrine of the uncreated and eternal character of the universe in terms of the Plotinian doctrine of emanation and to incline to pantheism. Again, as we shall see in a moment, meditation upon Aristotle's somewhat difficult teaching with regard to the active intellect led some of them to reject the personal immortality of the soul.

**Effect of Greek Philosophy on Islam.** The stimulation of philosophic speculation created for Islam much the same problems as it had raised for Christianity. It necessitated attempts at reconciling the results of reason with the revelation in the Koran, and, where independent thinking conflicted with revealed truth, as it did when it became pantheistic or denied personal immortality, it plagued Mohammedan with much the same heresies as harassed Christian orthodoxy. Moreover, mystical movements appeared, as in Christianity, sometimes confined within orthodox limits and sometimes overleaping those bounds and passing into the pantheistic camp.

The labor of rationalizing the Mohammedan revelation was undertaken by the Mutazilites, of which group the first Arab philosopher, Ibrahim ibn-Nazzam, an ardent defender of the freedom of the will, was a member. Better known is Al-Kindi who lived some fifty years later and exhibited the encyclopedic tendencies prevalent in Europe at the time. A century later, belonging to the same orthodox group but showing some tendencies towards pantheism, came Al-Farabi of Bagdad. He wrote at length on Aristotle, and tried to reconcile Aristotelian with Platonic teaching.

## II. AVICENNA

These earlier philosophers are all overshadowed by the great Avicenna (980-1036), who was also eminent in the medical world. His works, when translated into Latin, made a deep impression upon the Chris-

tian thinkers of the thirteenth century. A man of profound and universal learning, he read the *Metaphysics* of Aristotle forty times in an effort to overcome a difficulty eventually dispelled by chancing on a treatise of Al-Farabi's.

In his interpretation of Aristotle, Avicenna follows the Neo-Platonic lead. God emanates the universe from himself in a series of triads of mind, soul, and body, each one of which is identified with a heavenly sphere. This process terminates in the Aristotelian "active intellect," which governs directly the regions beneath the moon and transmits to all things their appropriate forms. From it human souls are also derived. Avicenna, however, stops short of absolute pantheism by preserving Matter as a principle of pure potentiality existing independent of God.

Avicenna also remains orthodox in defending the personal immortality of the soul and at the same time rejecting pre-existence and reincarnation. His psychology follows, with some complications, that of Aristotle. Against the triple division of the soul into vegetative, sensitive, and rational faculties he leans a five-runged ladder of knowledge mounting from mere potentiality of knowing to possession of the truth. To this he adds a final stage of Neo-Platonic and Plotinian, mystical ecstasy.

Avicenna also occupied himself with logic, which he treats as a method of philosophic thinking rather than as a part of philosophy itself. He divided philosophy into six departments, three—ethics, economics, and politics—"practical" in nature, and three—physics, mathematics, and theology—existing both as pure and as applied sciences. This division passed over into Christian Scholasticism.

### III. AL-GAZZALI

The attempt to construct a Mohammedan philosophy met with a resistance similar in its nature and its grounds to that offered to Christian speculation by elements in the Church like the School of St. Victor. The leader of the opposition was Al-Gazzali (1058-1111). He denounced as rankest heresy the view, inspired by Aristotle, that the universe is eternal and Avicenna's doctrine of the procession or emanation of the heavenly spheres from God. Furthermore, he demanded an unconditional surrender of reason to faith and a complete submission of philosophy to the truth revealed in the Koran.

Like the monks of St. Victor,\* again, Al-Gazzali was a confirmed mystic, but, like them, he kept his flights and his ecstasies at the

orthodox "ceiling" of aspiration and steered clear of disappearance into the pantheistic empyrean where the soul is engulfed again in the godhead from which she sprang. However, unlike the orthodox Christian mystic, and more in line with Plotinus, he regarded the final intuition of God, not as something beyond man's native powers and bestowed by divine grace, but as the natural and predictable result of an ascetic discipline open to every man and comparable to the scientific discipline by which the mind reaches intellectual clarity.

The mystical current in which Al-Gazzali was carried is known as Sufism. Its source lay in Mohammed himself, who was a man not only of practical genius but of ascetic temperament and mystic vision, and it seems to have tapped very early allied currents in Christianity, Neo-Platonism, and even Buddhism. Within three hundred years of the Prophet's death it had become an organized movement in the Mohammedan Church, submitted to a severe and ascetic rule of life and governed by a spiritual head. Al-Gazzali, however, poured into it theological and philosophical elements that made it one of the great waters of spiritual life in Islam. Henceforth mystical intuition was to rank officially with revelation and reason as a channel by which the Mohammedan verities are conveyed to the faithful.

#### IV. AVERRHOES

With the death of Avicenna, the center of Arabian philosophy shifted from the East to Spain where, a hundred and fifty years later at Cordova, it produced Averrhoes (1126-1198), as great if not greater a thinker and commentator of Aristotle. He, too, was a doctor by profession, and his philosophy resembles that of Avicenna in many important respects, as, for example, the eternity of the universe and the procession from God of an hierarchy of intellects, each one of which is the form, and the cause of motion, of its particular heavenly sphere. His view of Matter, however, was more Aristotelian and less Neo-Platonic than that of the other Arabs, in that he regarded it as less negative in character. For him it was potentiality teeming with latent forms which were actualized by the prime mover, who is the first of the minds generated from God.

Last and lowest of the emanated minds is the human intellect, the mover of the lunar sphere. This, like Aristotle's active intellect, is the light of universal and eternal truth, one and the same for all men in all times and places, which, as contemplative reason, resides in each human individual independent of his other conscious operations. For

Averrhoes, as for his master, the activity of contemplation is wholly impersonal, and, in so far as each one of us attains to it, he escapes from his particular personality and ceases to be himself. Moreover, as Aristotle also taught, it is the only operation of human consciousness that is not supported by the body and that survives its dissolution. All, then, that is individual and personal in us is destroyed by death. The impersonal intellect in us alone remains unextinguished. There is no such thing as personal immortality.

Doctrines like the eternity of the universe, the emanation of the spheres, and the destruction and death of the individual soul were, as we have seen, as heretical in Mohammedan as in Christian eyes. Averrhoes knew it and sought to defend himself by a method not unlike one used later by free thinkers to avoid condemnation by the Catholic Church. There are, he said, two kinds or degrees of truth. One is philosophic, and, though not wholly in accord with the letter of the Koran, is not incompatible with an allegorical interpretation of it. The other kind is reached by theology, whose demands are satisfied by probabilities. It is grasped by simple religious faith which is satisfied with imaginative pictures and symbols. For example, the orthodox assertion that the universe has a beginning is the way in which minds confined within the limits of religious symbology and theological argument symbolize and image the philosophic truth that the universe is eternal.

This device gave rise in Christian Europe to the doctrine of the "two-fold truth," which sought to justify heretical doctrines on the ground that they were the conclusions at which human reason must necessarily arrive, and which all thinking men would accept, were it not for the other truth, the Christian verities revealed in the Scriptures. It met, however, with as little success in the one case as in the other. Christians and Mohammedans alike saw through the subterfuge almost at once, and, in spite of it, Averrhoes became a suspect and fell into ecclesiastical and political disfavor.

#### V. AVICEBRON

Before crossing the Pyrenees and re-entering Christendom, we ought to say a word about the progress of philosophy among the Jews, particularly as there was much reciprocal give and take between them and the Arabs. The two great Hebrew philosophers of the times, both of them belonging to the Jewish colony in Spain, were Avicëbron in the eleventh, and Maimonides in the twelfth century. Avicëbron drew

his inspiration from Neo-Platonism, but, like the Arabs, he tried to stop short of out-and-out pantheism. His reservations, however, were different. Whereas the Arabs saved themselves by positing Matter or Potentiality as co-eternal with God, Avicenna began at the beginning and separated God from the universe by an act of free-will. From the ineffable One, which, as with Plotinus, transcends all characterization, issues the Will to create, and from this Will emanate, not only Form, but Matter understood in the Aristotelian sense of potentiality. These are the fundamental principles permeating all being from the world-mind in which they first appear down to corporeal substance.

But unions of Form and Matter are not only universal and general in character. They are also individual. Each particular thing, therefore, has not merely the form and matter of its species and its genus, but also a unique Form and Matter belonging to itself alone.

#### VI. MAIMONIDES

**Revelation and Philosophy.** Maimonides of Cordova, though influenced by Neo-Platonism, was dominated by Aristotle, but by an Aristotle of the Arab and particularly of the Averrhoistic type. Like Averrhoes, he was also concerned with reconciling the results of philosophizing with revealed truth. Revelation, he felt, must be so interpreted as not to conflict with truths or facts established beyond all uncertainty. At the same time, if a philosophical conclusion is no more certainly proved than a revealed truth, revelation has the right of way. For this reason Maimonides refuses to accept the doctrines of the eternity of the universe and of Matter, and holds to the theory that they had a beginning and were created by God. This is the teaching of the Old Testament and, philosophically, honors are even between it and the view that the world is uncreated and without beginning, since neither view can be established or disestablished on rational grounds.

**Nature of God and the Universe.** Since, however, we cannot prove that the universe is created, we cannot in Maimonides' opinion argue from its existence the logical necessity of a creator. The so-called "cosmological" proof of God's existence is then philosophically dubious. Here again, as in every case of philosophic doubt, we may trust the Scriptures. But we may also follow Aristotle and show that, though the existence of a creator cannot be proved, the necessary existence of some reason for the change and motion going on in the world can be philosophically demonstrated. Even though alteration and move-

ment be as everlasting and therefore as uncreated as the universe, they can still be conceived as eternally inspired by the attraction of the divine perfection. If, then, the argument from efficient causation is unsound, the argument from final causation still holds. Therefore, we have philosophic as well as revealed assurance of God's existence.

When we come to discuss the nature of God, we find that he is even more transcendent than the Aristotelian deity. Like the Plotinian One he is ineffable. We can say what he is not but not what he is.

In his description of the universe Maimonides follows Avicbron and Averrhoes. From God proceeds a descending series of intellects presiding over the heavenly spheres and terminating in the active intellect that displays itself in human thinking. But Maimonides argues with Aristotle against Avicbron that these intellects are pure Form unmixed with Matter, and makes a sharp distinction between the matter of the heavenly spheres and that of things on earth.

Like Averrhoes he rejects personal immortality. To be sure, the impersonal active intellect, by actualizing the individual's capacity for thinking, endows him for a brief time with a mind of his own. But the capacity for individual and personal thinking disappears with the destruction of the body, and only the active intellect survives. At the same time, the individual in his present existence may increase his vision of the truth and his hold on the eternal, and thus identify his personal life with the operations of the active intellect. By so doing he attains peace and happiness and salvation and a sort of immortality here and now.

## Chapter XXVII

# ARISTOTLE VS. PLATO

### I. FIRST CHRISTIAN REACTION TO ARISTOTLE

We can easily understand that a philosopher like Aristotle who denied that Matter and the universe had been created, who disbelieved in personal immortality, and whose views regarding the divine gave little support to belief in a personal deity, might not commend himself at first sight to the Church. Nor was the situation eased by the emanatistic and pantheistic glosses given the Aristotelian teaching by the Arabian and Jewish commentators, as his work passed through their hands. So it was that the *Physics*, to which the heresy of David of Dinant was attributed, was banned in Christendom in 1209, and the *Metaphysics* was suppressed six years later.

This condemnation, however, was of short duration, and by the middle of the thirteenth century Aristotle's physics and metaphysics were being officially taught, with expurgations, at the University of Paris, which had been founded some fifty years before. Here, and at its offshoot at Oxford, the renewed interest in the Aristotelian philosophy was centered. Further translations were made, no longer from Arabic, but from Greek, knowledge of which was being regained by the West, thanks to the Crusades and to more intimate relations with the Byzantine Empire. By 1260 William of Moerbeke, a friend of Aquinas, was undertaking a critical edition of the whole Greek text, with Latin versions of all the works hitherto untranslated. To him Europe owed its first acquaintance with the *Politics*, of whose existence the Arab scholars were unaware.

### II. MODIFICATION OF PLATONIC TRADITION BY ARISTOTELIAN INFLUENCE

**William of Auvergne.** But the revived cult did not displace overnight the Platonic tradition handed on by Augustine and Anselm. The latter continued to claim its votaries, who, however, could not escape the ever-increasing Aristotelian influence. Among them we may



mention William of Auvergne (d. 1249), Alexander of Hales (d. 1245), and Bonaventure (1221-1274). To the Augustinian teaching regarding God and the soul William of Auvergne adds little that is new. In his theory of knowledge, also, he clings for the most part to Augustine. But he knows his Aristotle and his Arabs, if only to criticize them. He argues against the eternity of the world and the teaching that Matter is the principle that individuates members of the same species from one another, and attacks the Neo-Platonic theory of emanation and the Arabian view regarding the procession of the intelligences and their spheres from God. He also dispenses with the active intellect and finds that the potential intellect is capable of producing forms by itself when stimulated by sense experience. Aristotle's physics, however, he is inclined to accept, in so far as the explanation of natural phenomena is concerned.

**Alexander of Hales.** Upon Alexander of Hales the hand of Aristotle lies more heavily. All beings save God, he tells us, are a mixture of matter and form, potentiality and actuality. God alone is pure form and pure actuality. Against both pantheism and emanation he sternly sets his face. God cannot be the substance or the source of the substance of all things, since things are made of different stuffs. Spiritual matter or potentiality is capacity for thinking but not for moving or changing; the matter or potentiality displayed by the heavenly bodies is capacity for motion but not for alteration; and the matter of terrestrial bodies is capacity for both movement and change. Although, then, matter is present in all created beings, it is not one and the same matter in them all. Hence there is no one substratum of any sort, divine or non-divine, created or emanated, of which they could be modes.

**The Soul and the "Active Intellect."** At this point, however, another question arises. If the soul is not pure form and a pure activity of thinking, but possesses a potential or unrealized capacity for thought as well, there must be an agent by which this capacity is realized. So it is that Alexander is forced to invoke the active intellect of Aristotle, though he has a hard time trying to work it into his Augustinian psychology and finds it a white elephant on his hands. It made trouble, too, for all the other philosophers of the Franciscan order who followed in his steps. Grosseteste tried to deal with it by interpreting it in terms of the Augustinian doctrine of the inner light by virtue of which the soul is able to grasp eternal truth. John of Rochelle, a pupil of Alexander's, identified it with God, and only saved himself by heroic efforts from the pantheism his view implied.

**The Tripartite Soul.** Another question, closely allied with the status of the active intellect, also comes to the fore in Alexander. Hitherto, following the Augustinian teaching, the soul had been generally regarded as a single unit expressing one and the same identical essence in the exercise of her various faculties. Aristotle, however, by his doctrine of three separate souls responsible respectively for the vital functions, the activities of the senses, and the operations of thought, had suggested that the Christian soul, at least, is not to be identified with them all. Alexander, for example, believes not the soul but a separate vital principle to be the source of life in the body. And in discussing the operations of knowledge he tries to limit the function of the active intellect to actualizing the Forms underlying the physical universe and contained in the potential intellect. Upon the active intellect thus degraded he superimposes the Augustinian faculties of the intellect that knows other created minds and the intelligence that by special illumination from God contains and grasps eternal truths and first principles.

**Substantial Forms.** Finally, in Alexander we come face to face with perhaps the most difficult and confusing of all the problems raised in the process of recasting Christian theology in Aristotelian mold—the question of *substantial forms*. If the soul is an actualization of potentiality, albeit spiritual, she must be a composite *spiritual substance* like any material substance in which Form and Matter are combined. Furthermore, the body, in so far as it contains potentialities capable of further realization, will not find them formulated and actualized in the soul, as Aristotle taught, but in a *corporeal* Form on the corporeal level of existence. In short, the soul will no longer be the Form and actualization of the body, and the body will no longer be the Matter of which the soul is the Form. Both body and soul will henceforth provide each its own Form and Matter, or in other words will possess each its own *substantial form*. In that case, however, the human being is no longer a union of Form and Matter but an association of two composite substances, in each one of which Form and Matter are conjoined.

### III. BONAVENTURE

**Disagreement with Alexander.** Alexander, then, in fathering the doctrine of *substantial forms* had laid quite as embarrassing a question on the doorstep of the Franciscans as that of the active intellect. It was left to the ablest theologian of them all, the eminent Bonaventure, to take up these two obstreperous problems and deal with them as best

he could. He began by denying outright the distinction made by Alexander between spiritual and corporeal Matter and Potentiality. The difference between spirit and body is one of Form alone. Matter is not only universally present in all created things, it is universally one and the same in them all. The basis of this sameness would seem to lie in the fact that in the mind of God there exists a single, universal concept of Potentiality as such.

**Existence of Substantial Forms.** Nevertheless, and here Bonaventure agrees with Alexander, *substantial forms* exist. Though spirit and body are formulations of the same Matter, they actualize different capacities it possesses. Actualizing each a different capacity, each contains within itself its proper potentiality as well as its proper form, and does not require any other level or kind of existence to support it. Both spirit and body, then, have *substantial forms*. It follows that the human soul, being spirit, is not the actualization of potentialities afforded by the body, but is an actualization of spiritual potentiality. Hence, she exists independently of the body and is immortal.

Still, Bonaventure contends, the fact that the soul is a *substantial form*, independent of the body, does not prevent her from also constituting in Aristotelian fashion, the "entelechy" or fulfillment, of the body in which she resides. True, the body has its corporeal *substantial form*, just as the soul has her spiritual one. But without the soul, the body could not realize its highest capacity, fulfill its highest purpose, and perform its crowning function—the capacity, purpose, and function of housing and feeding her. The *substantial form* of the body stands, then, to the substantial form of the soul in the Aristotelian relation of Potentiality to actuality.

**Nature of Individuation.** But what individuates one man or one soul from another and gives rise to a myriad particular instances of the actualization of the nature of the soul and of the human species? Is it Matter, as Aristotle taught, embodying over and over again one and the same human form? Or have Tom, Dick, and Harry not only a common human nature, but also each his own individual form, which adds their particular characters to their common humanity? It is, Bonaventure replies, neither the one nor the other, taken by itself. There is, he insists, no such thing as a form of the individual. The *essence* of the individual is always identical with the *essence* of the species. The deepest thing in Tom, Dick, and Harry, for example, lies not in what distinguishes them from one another, but in the *human species* which unites them and, in spite of their individual peculiarities, makes all three *men*.

But—and this is what makes real individuals of them—in Tom, Dick, and Harry there are actualized not only the Form of the human species, but other Forms as well—the Forms of the particular attributes and qualities, whose presence or absence in different combinations or degrees serves to set them apart and make them three distinct people. Although, then, they have no individual *essences* or Forms of their own, they each combine in a unique and unreduplicated way the human species with a lot of other Forms, and the composite result is particular, though all its ingredients are universals. In short, each individual is a composite substantial form mixing in a special way a number of other substantial forms and owing, like every substantial form, its existence neither to Form nor Matter alone but to the interaction of the two.

**The “Active Intellect.”** The active intellect Bonaventure treats more summarily. Like Alexander, he limits its function to extracting from sensible experience and imagery the Forms embodied in sensible objects. Knowledge of one’s self, of the eternal verities, and of God are the work of the Augustinian “inner light,” with which the grace of God illumines the soul. Bonaventure is one of the great mystics of all time, and his description of the further reaches of knowledge, as it rises from cognition of the sensible world to apprehension of God, portrays the steps by which the soul, estranged from the good and blinded to the truth by sin, regains the beatific vision, the enjoyment of which is her supreme bliss and peace.

**The Existence of God.** The splendor of the created universe testifies to God’s existence and reflects his glory. We may well then meditate upon the harmony and order and beauty of the sensible world. From them we may also argue the necessity of a being that accounts for its existence, its nature, and its motion. However, these intimations of God’s presence and God’s glory are as nothing compared to those we find when we look within ourselves. There, in the power to remember, which gives continuous existence and personal identity to the soul, in the power to know, which depends for its exercise upon the images retained by memory, and in the power to love, which without memory and knowledge we could not possess, we find the Trinity reflected and the generation of the Son by the Father and the procession of the Holy Ghost.

There, too, by the aid of a faculty of intellect, higher than the active reason which deals only with the structure of the sensible world, we find God’s existence proved, as Anselm proved it, by the presence in the soul of the idea of a perfect being. Nay more, as Augustine had

already pointed out, our minds could not entertain the concepts of eternal truths unless those truths existed, and those truths could not exist except in a divine mind, or be imparted to us finite and fallible beings save by divine grace. Knowledge, then, is a reception of God's likeness by the mind, not abstracted from experience, as the Forms of the physical world are abstracted from sense by the active intellect, but infused into us from above. God, in a word, is a necessary presupposition not only of our mere being, or *existence*, but of our being what we are, or *essence*.

Finally, we have the same direct intuition of God's existence that we have of our own. Still, we can have no intellectual concept of what God is like. Even the eternal truths are not apprehended as they exist in the divine mind, but obscurely and incompletely. This is due to our finite and created natures, and to the further blinding of our minds by the Fall. We occupy an ambiguous situation, placed as we are between the rest of the created universe and God, and drawing, as we do, upon both for knowledge, we find the certainties derived from one source clouded by the not so certain conclusions drawn from the other.

If, then, there is any further degree of approach to the divine, it must be made by other than intellectual means. Such a way exists—the way of all the great mystics. It is the secret and ineffable way of ecstasy. To tread it, Bonaventure tells us, we must pass from theological doctrine to the divine grace for our support. We must abandon study for prayer. We must cease to think and must only love. Then a burning flame will take the place of the divine light, whose heat will consume all our dross and leave in us God and God alone.

**Avoidance of Pantheism.** Bonaventure, however, remains an orthodox mystic, and never, in theory at least, allows himself to break down the barriers that separate the finite and the created soul from her creator. That there is a creator *separate* from the universe is proved by the fact that nowhere in it do we find anything whose nature or essence implies or necessitates existence. All its constituents, then, owe their being not to their own power of self-existence but to an eternal cause. Furthermore the created cannot be co-eternal with the creator, as Aristotle taught, but must have a beginning in time. This point Bonaventure argues at length, and here disagrees with his contemporary, Aquinas, who, like Maimonides, finds reason equally complacent to both theories, but revelation asserting a creation out of nothing by divine fiat.

## *Chapter XXVIII*

# THOMAS AQUINAS

### I. THOMAS'S TEACHER, ALBERTUS MAGNUS

**Triumph of Aristotle over Plato.** With Bonaventure the Platonic tradition, which, as we have seen, was becoming more and more tinged with Aristotelianism, came definitely to an end in the Catholic Church. Side by side with him, Albertus Magnus (1206?-1280) and Thomas Aquinas were effecting the great synthesis of Christian doctrine, in purely Aristotelian terms, which was to become the Church's official philosophy. The foundations of this synthesis were laid by Albertus' encyclopedic work of collecting from the Greeks, Arabs, and Jews everything that bore on Aristotle, and of writing an exhaustive paraphrase and exposition of his works and a commentary upon them. His mind, like that of his philosophic master, was universal in its scope, his learning was profound, and his acquaintance with the physical sciences and mathematics of the day was thorough and complete. Indeed, his interest in natural phenomena and his sympathy with the new methods of observation, experiment, and inductive reasoning which were now beginning to make headway put him, one foot at least, in the very current of thought that was so soon to undermine the Aristotelianism of which he was so ardent a champion.

Born a German, Albertus took up soldiering as a career, only after a few years to become a Dominican monk. He traveled widely, taught at Cologne and other German cities, and spent three years in Paris. Eventually he became bishop of Ratisbon—which office he resigned in order to return to the Dominican monastery at Cologne and devote himself to his studies.

**Aristotle and Revelation.** Albertus was not only an encyclopedist and commentator, he was a philosopher of note. In dealing with Aristotle he tried to divest him of the glosses introduced by the Arabs and to recover his original thought. Nor did he try to read into him Christian doctrines. He took him as he stood, and, so taking him, regarded his teaching as the supreme achievement of the unaided human intellect. The natural light of reason could not be expected to discover

and make clear the trinitarian nature of God, or the why and wherefore of the Incarnation and Redemption. These had to be revealed to the human mind from on high. They were not then matters to be reasoned about but to be accepted as articles of faith, and as such they were subjects not for philosophy but theology.

But, Albertus insisted, in her own field, thus sharply demarcated from that of theology, philosophy had the right to speculate freely, as Aristotle had done, and to come to such conclusions regarding the nature of God and the universe as reason might indicate. If these conclusions ran counter to revelation, then faith had the right of way. Otherwise philosophy might proceed as far as she could.

Claiming this liberty for himself, Albertus anticipated in many respects the work of his pupil Aquinas. But in others he remained a member of the old school. He maintained that spirits are a union of Form and Matter, that the soul is a substantial form and inseparable from all her faculties, including the vegetative, and he held to the doctrine of "seminal reasons" or special predispositions to particular Forms in Matter and to the mixture of Forms in individuals. He also continued the argument against the eternity of Matter and of the universe—though seemingly, like Aquinas, he regarded creation by fiat as a revealed truth which reason by itself cannot establish. Like Aquinas, again, he rejected the "ontological proof" of Anselm and based his demonstration of God's existence upon inferences drawn from the existence and nature of the world.

## II. AQUINAS' LIFE

Thomas Aquinas (1227-1274) accomplished in his much shorter life a philosophic synthesis as wide as and more profound than that of his master. Born into the great family of the Counts of Aquino near Naples, he was educated at Monte Cassino, and entered the Dominican order. This he did against the will of his father, and so much to the disgust of his brothers that they kidnapped him and held him prisoner in the family stronghold at Roccaseone for two years. At last he escaped and made his way to Paris where he became a pupil of Albertus Magnus. From Paris he followed Albertus to Cologne and spent four years there. In 1252 he returned to the Sorbonne to study theology, receiving his master's degree seven years later. The rest of his life he spent between Italy and Paris teaching.

He was a prolific writer. He commented at length not only on Aristotle but on the pseudo-Dionysius and on the *Sentences* of Peter

Lombard, and, in addition to many other treatises, wrote the two monumental *Summae*, the *Summa Theologiae* and the *Summa contra Gentiles*.

### III. GOD AND THE UNIVERSE

Like Albertus, Aquinas delimits sharply the fields of philosophy and theology. The subject-matter of philosophy is restricted to everything that lies open to argument, and its purpose to the establishment of such truth as can be discovered and demonstrated by the use of human reason. The subject-matter of theology is the content of faith, or, in other words, is revealed truth, which reason is incapable of discovering and demonstrating and about which there can be no argument. Nevertheless, the two fields overlap. Since no truth can contradict reason, the "mysteries" of faith cannot be unintelligible but are simply beyond our finite, human understanding. They, therefore, can be reasoned about as far as reasoning will carry us, and prove to be, in part at least, within human comprehension. The existence of God, for example, can be proved by reason apart from revelation, as Aristotle showed. Other theological points, too, are susceptible of rational demonstration. Indeed, a good part of philosophy—the most important part in fact—is devoted to matters of theological interest and forms a *natural theology*, as Aquinas calls it, to be distinguished from *revealed theology*.

### IV. PHILOSOPHICAL PROOFS OF GOD'S EXISTENCE AND NATURE

**Existence of God Proved.** Turning now to the most fundamental of all problems, the existence of God, Aquinas holds that we cannot argue his existence from the existence in our minds of an idea of him, for we can have no definite idea of the infinite, let alone its implication of necessary existence. Nor can we demonstrate his existence on the ground that we need a creator to account for the existence of the universe. Philosophically speaking, the Aristotelian view that Matter and the universe are uncreated and eternal is every whit as sound as the view that it is created by God out of nothing. The honors then are even, in so far as natural theology is concerned, and we must appeal to revealed theology to turn the trick in favor of special creation and a creator.

However, the absence of revealed light and the belief that Matter and the universe are eternal and uncreated, did not prevent Aristotle from proving the existence of God. He showed that the perpetual



actualization of Potentiality and formulation of Matter, to which all the activities of the universe may be reduced, become intelligible only on the supposition that there is an unmoved and therefore uncreated, self-existent and wholly actualized Form of being whose sheer perfection sets the whole world moving in pursuit of it. Add to this proof the arguments for a cause of motion at the beginning of the series as well as at the end of it, for a reason why things are necessarily what they are, and for an explanation of the order and the harmony in the universe, and we can rest assured that God exists.

**Philosophical Knowledge of God's Nature.** Have we also any "natural light" respecting the *nature* of God? Yes, the Aristotelian argument for his existence shows us that he is the sole example of pure Actuality and therefore a single being, that he must be immutable and without alteration or shadow of turning, and that he must be absolute perfection and therefore supremely good. Furthermore, he must be infinite, and therefore must possess to an infinite degree the good characteristics, like intelligence, knowledge, and benevolence, freedom and power, found partially displayed by finite creatures.

But how can such a being account for the existence of a world in which there are not only many individual things, but many Forms, and in which there are movement, change, and imperfection. To answer the first query, Aquinas is obliged to desert the Aristotelian view that God knows only his own Form and to inject into the divine mind the world of Platonic Ideas. God's self-knowledge is therefore a knowledge of the whole formal structure of the universe, which, as Augustine and his followers had taught, constitutes in the divine mind a plan or model in accordance with which the world is created.

**Explanation of Imperfection.** In explaining the imperfection of the universe, Aquinas would seem once more to part with Aristotle and to lean toward Neo-Platonism. First he invokes "metaphysical evil," or the doctrine that whatever is not God must of necessity be imperfect and that the Forms of created things constitute a ladder of descending degrees of perfection. Aristotle, it should be said, also admitted such an hierarchy. Below God comes the hierarchy of angels. Being pure spirit, they are, in Aquinas' opinion, devoid of Matter and Potentiality. Here he disagrees sharply with both Alexander of Hales' view that there is a spiritual matter distinct from corporeal matter, and with Bonaventure's doctrine that Matter, though universally the same, possesses a capacity for taking on the Form of spirit as well as that

of body. What differentiates the angels from God is that their natures are not self-existent but created, or, in other words, that their essence and their existence are not identical.

#### V. FORM AND MATTER

**Men and Angels.** There is one odd but, as we shall see in a moment, extremely significant consequence of the purely formal nature of angels. All Forms, and here Aquinas is thoroughly Aristotelian, are Universals. The most particularized Form is at least that of a species. There are no Forms of individuals, as Plotinus maintained. If, then, the angels are pure form, no angel is, properly speaking, an individual. Each is a species unto himself. Herein angels differ from human beings, each one of whom is not a species unto himself but a particular instance of the species "man," which he shares with all his fellow-men.

**Man and Matter.** But why this difference between an angelic and a human being? The answer lies in a kind of Siamese-twin of the assertion that all Forms are Universals—the Aristotelian doctrine, also adopted by Aquinas in defiance of Scholastic tradition, *that Matter is the principle that individuates all particular objects from one another.*

Human beings, unlike angels, are not pure Form. They have bodies as well as souls, and are therefore a mixture of Form and Matter. In them the Form of the human species actualizes Potentiality in the different ways that we call Tom, Dick, and Harry. But there is no such thing as a Form of Tom or Dick. Their souls, or individualities, or personalities, are just particular actualizations by the human species of Matter's capacity for being worked into that Form. The distinction, then, between human individuals, as between all other particular objects, is not due to the possession of separate Forms, for all men have only one Form, the human. It is due rather to the indeterminate nature of Matter which lends itself to a variety of determinations by the same Form. Matter, therefore, is the reason why there are *many* men or *many* anything. Incidentally, its indeterminate character accounts for its failure to register finished and flawless instances of the Form in question. To it all the physical imperfections of the universe, as well as the multiple and extended character of the world, are to be attributed.

**No Plurality of Substantial Forms.** Furthermore, Aquinas thinks, Bonaventure's teaching that the individual can have more than one *substantial form* is incorrect. Substantially, a thing is simply what it

is and nothing else. All Forms, then, other than that which defines its essence, will be conjoined with it simply as *accidental* properties. They will in no wise mix with it and become ingredients in what makes it *substantially* what it is. They can be put on or off without affecting its real self. We cannot, then, appeal to different mixtures of substantial forms as the principle of individuation. Once more we must have recourse to Matter.

But how can one and the same universal Form by actualizing one and the same absolutely indeterminate Matter produce different particular determinations of that Matter? It cannot. When, for example, the Form of the human species actualizes individual men, we must not think of it as actualizing an indeterminate possibility of anything and everything. We must think of the soul rather as an actualization of Matter already prepared to form the individual in question.

#### VI. THE STATUS OF UNIVERSALS

Finally Aquinas has to deal with the old question of the status of Universals. Here, as we have already seen, he has deserted the Aristotelian position that Forms exist only in particular objects, and made them ideas and archetypes in the divine mind. Still, since this is not to say, as Plato did, that they exist in themselves, independent of any mind whatsoever, Aquinas criticizes Plato and regards his own position as not incompatible with Aristotle's teaching. The Forms are also immanent in the universe, and are inseparable there from the particular objects that embody and enact them. However, they may be abstracted by the mind from other particular instances, in which they appear as common qualities and resemblances, and may be dealt with without reference to the particular conditions under which they occur. As concepts of the mind they are no more separable from the intellect, which entertains them, than they are, as Forms of material things, from the things which materialize them. The object of knowledge, in so far as it is known, becomes a mode or thought of the thinking subject. The Forms, then, are at once God's ideas, the formal structure of the sensible world, and concepts formed by and forming the human intellect. But they are not *merely* any one of these.

In this doctrine Aquinas writes journey's end to the middle way chosen by Abelard in avoiding the extremes in the controversy over the status of Universals. It comes as near the Aristotelian doctrine as the exigencies of Christian orthodoxy, and the consequent concessions to the modified Platonism of Augustine, would permit.

## VII. PSYCHOLOGY

**The Active Intellect.** In his view of the functions and dignity of the active intellect Aquinas restores that faculty to the position that Aristotle had assigned it, and from which William of Auvergne and Alexander of Hales had degraded it. It is, he says, the highest faculty of the soul, the possession of which makes man but little lower than the angels. It is a ray of the inner light, of the divine illumination, which, according to Augustine and his followers, enables the soul to grasp and to unite herself with eternal truth. Its nature is to actualize within her the system of Forms that constitutes the intelligible structure of the universe. Were it pure intellect like the angels, it would see truth face to face. But, since the human being is a composite of Form and Matter, of Actuality and Potentiality, the truth is not completely and once and for all realized by his mind. His vision of it is partial, obscure, intermittent, and laboriously attained. In other words, his mind is in great part only an unrealized capacity for knowledge, or a passive and potential intellect.

Furthermore, man has a body, and senses, and sensible experience crowded with individual data, and it is through perception that he gets his first contacts with the external world and his first incentive to think. His intellectual processes are not self-initiating and self-supporting. Sensible experience pushes the button that sets the active part of the intellect to work realizing the truth it potentially contains. This operation consists in abstracting from the particulars of sense-experience their common and universal characteristics—in other words, their Forms.

To some extent the preliminaries to the formation of universal concepts have been performed by the senses themselves. Acted upon by external objects, they absorb the sensible characteristics, or species, of these objects, abstracted, to be sure, from their matter, but still sensible in character. We *perceive*, for example, not only a blue cup or a blue plate, but the color blue, which is a *sensible species* present in both objects.

**The Process of Understanding.** Sensible species, however, do not help us to *understand*. To understand we must, as we say, reduce things to *intelligible* terms. Here the active intellect enters upon the scene. Stimulated by the sensible species, it proceeds to make them intelligible by abstracting from them, or, in other words, by actualizing in itself, the universal laws and types and natures which they exemplify

and suggest, and which the potential intellect, or our capacity for knowing the truth about them, already contains. Thus, little by little, by a process that is, on the one hand, a progressive discovery in things, and, on the other, a progressive actualization in the mind, of ever more inclusive and more fundamental Forms, the nature of the sensible world is comprehended and the intellect's power of comprehending it is realized. Finally, the whole intelligible structure and ultimate explanation of the universe, abstracted from the sensible medium in which it is first conveyed to us, fills the intellect and fulfills the intellect's capacity for knowledge, enlightening it with the vision of absolute truth, in so far as a finite and embodied mind can be enlightened.

**Immortality of the Soul.** For Aquinas, as for Aristotle, the active intellect alone survives the dissolution of the body. The sensitive and vegetative functions of the soul, depending as they do upon the body for their activity, perish with it. However, Aquinas modifies the Aristotelian doctrine to meet the Christian demand for personal immortality. For Aristotle the active intellect was as impersonal in character and as devoid of particular location as the universal truth it enshrined. For Aquinas, the whole substance of the soul, to which both personality and will are essential, share in the deathlessness of the active intellect with which she is endowed. *We*, then, do not perish with the body. Not merely the vision and the contemplation of truth survives death; *your* vision and *my* vision, *you* and *I* also endure after the body has collapsed beneath us.

It was difficult to reconcile such doctrine with the assertions that Matter is the principle of individuation and that therefore the angels, being disembodied, must be species not individuals. It was no less hard to reconcile it with the view, upon which not only Aristotle but the Christians themselves insisted, that the human being is constituted by a union of Form and Matter, of soul and body, and therefore, when deprived of a body and reduced to soul, pure and simple, must be incomplete. Theology, however, came to the rescue with the revealed teaching of the resurrection of the body and its eventual reunion with the soul.

#### VIII. ETHICS

**Knowledge of God the Highest Good.** Knowledge, as we have just seen, is an activity. It is a search for truth, an attempt to reach God. God, therefore, is the end for which knowledge strives. But to have a direction and a terminus is to have volition and love. The soul natu-

rally desires and wills what she seeks. Her will and her love have, then, the same end as her knowledge. All desires and all affections converge upon God. God is her supreme good, just as he is supreme truth. But just as truth is first seen through a sensible medium as in a glass darkly, and the Universal is found only in its individual instances, so the supreme good is not apprehended and loved immediately, but broken and distorted and obscured in different degrees by a myriad individual goods and a variety of particular desires and affections.

Thus the moral problem arises of which course to choose between alternative desires and goods. Those most in accordance with the sovereign good, or, in other words, most pleasing to God, must be discovered and followed. All morality, all law, all obligation, are based upon God's will. Ethics studies the alternative courses of action with which we are confronted and seeks to discover among them those which lead to a realization of the end of human life. The results of its investigations counsel self-control, the subjugation of the passions by reason, the avoidance of vice and the pursuit of virtue, and the development of the contemplative life. They establish the institution of the monogamous family and the right to possess private property as God-given. They demand that the sovereign power in the state shall be exercised for the well-being of the whole community.

**Happiness Not on Earth but in Heaven.** Still, the most scrupulous observance of God's ordinances and the most painstaking cultivation of the moral and intellectual virtues cannot give the soul complete peace and happiness in this life. She is by nature supernatural, and her destiny can be fulfilled only on the supernatural plane. No matter how exemplary her conduct, or how concentrated upon God her thoughts may be while she is on earth, it is beyond death that she must look for the attainment of her sovereign good. At the most she can but prepare herself here below for her true life beyond the grave. But that preparation is of tremendous import, for it unlocks the doors to heaven or to hell, according as the soul has followed or has spurned the discipline imposed by God.

**Free-Will of Self-Determination.** It is within the power of the soul to make this choice, to accept or to reject, and herein lie human freedom and moral responsibility. At the same time, Aquinas does not attribute to the soul an absolute "indifference" of the will in the face of alternatives. The will is naturally and necessarily directed towards the good. We cannot exercise volition except at the incentive of desire and towards its satisfaction. If the will, then, were enlightened by an

accurate knowledge of the true good, it would spontaneously, necessarily, and freely prefer, choose, and pursue it. No alternative course would be present or possible to it. Still, because of its essential self-determination to the good, this inability to entertain or to follow, or in other words, to *will*, any other course, does not destroy our liberty of volition but rather expresses it.

For example, God, Aquinas insists, who is himself the sovereign good and has absolute knowledge of it, *cannot* will other than the absolute good. No alternative to doing good is possible in his case. He *cannot* choose or will evil. Being himself good, he *must* will the good. His choice and will are not uncaused and undetermined. They proceed by inexorable necessity from his nature. But to be completely determined by absolute goodness and to will only the absolute good is perfect freedom.

By thus attributing to God freedom, not of indifference, but of self-determination, Aquinas placed himself emphatically in the rank of those who held that the divine character is prior to the divine will, and that a wholly sufficient and completely determining reason for what God *does* is to be found in what he *is*. Since he is absolutely benevolent, just, wise, and intelligent, his volition and his behavior must necessarily express these qualities. This teaching of the priority of the intellect over the will in the divine nature was, as we shall see in a moment, bitterly attacked by Duns Scotus.

**Self-Determination and the Choice of Goods.** Descending now to man, we find that he, too, is self-determined to the good. He cannot choose or will any course of action that he does not think, at the moment, will attain a desired end and satisfy a want. But unfortunately the human will, unlike the divine, is not enlightened and determined by an accurate knowledge of what the truly desirable end and the deepest wants really are. Because of his material nature and its attachments to the physical and temporal world, man has no clear vision and no undivided love of the sovereign good. His eye is caught on every side by relative and contingent goods, satisfactions of the moment, gratifications of the senses, worldly successes, and the like, which divide the love of which God is the proper object, and scatter it in a thousand conflicting drives upon as many different satisfactions.

Therefore man, unlike God, is always confronted with alternative choices and courses of action between different goods and different ways of attaining them. His problem—the problem that makes him a moral being—is to select, under the guidance of reason rather than of passion, the alternatives designated by the intellect as best calculated

to attain the highest and deepest good. Since we have only an indirect knowledge of its nature, gained by reasoning and by revelation, our choices must often miss the mark and lead us away from God rather than towards him. Even so, choice of the wrong course is dictated by the desire to satisfy a want and attain a *good*, and is therefore not imposed upon us by an outer force, but is determined by the impulse to pursue good, which is the very essence of the will. An evil choice is simply a mistaken choice, a choice of a spurious good—good, because it satisfies desire, spurious, because it satisfies desires that alienate the soul from God. Since, then, all alternatives present themselves under the general form of the good, whichever alternative is chosen is willed under no compulsion save that of our own self-determination. Our choice of it is therefore a free choice, for which we are morally responsible and for which we merit punishment or reward.

#### IX. PHYSICS AND ASTRONOMY

**The World-Process.** Aquinas' physics follows closely that of Aristotle. The world-process is essentially an increasing actualization and exhaustion of Potentiality in a ladder of Forms, and each new substance to which the union of Form and Matter gives birth is double-faced. It is Form in as far as it has realized possibilities latent in less highly organized beings, but it is at the same time stuff or Potentiality for further formulation and actualization.

His insistence upon the graduated nature of the process of ascent leads Aquinas to reject the widely accepted Augustinian theory of "seminal reasons" or "predispositions" for all sorts of Forms, innate in Matter itself. It is only by being first actualized in a given Form that Matter can become predisposed to receive further formulation.

**The Heavens and the Earth.** Again, Aquinas follows Aristotle in sharply contrasting the more perfect matter of the heavenly spheres, infected with spatial movement but immune from qualitative change, with the matter of the terrestrial elements which is corrupted by both potentialities. Moreover, celestial matter is endowed with superior, spherical motion, whereas the terrestrial elements tend to follow straight lines as befits their inferior substance. Incidentally, Aquinas accepts the Aristotelian geocentric astronomy as corrected and amplified by Ptolemy and other later astronomers, but he admits that it is only a provisional hypothesis, not necessarily true, which may some time be supplanted by some other explanation of the perceived movements of the heavenly bodies.



As we have seen, while Aquinas admitted that the "cosmological" arguments for the existence of God are inconclusive, he accepted as logically necessary Aristotle's postulation of an unmoved Mover, making the world go round out of sheer love of perfection. Like Aristotle, he regards the initial circular movement of the outer heaven as the source of all the motion and of the processes of generation and corruption that go on in the sublunar sphere.

**Man.** The apex of the sublunar aspiration and movement from Potentiality to Actuality is man, in whom Matter is at last formulated to such a point that it can support an immortal soul. In a way that anticipates somewhat the modern discovery that the gestation of the embryo briefly recapitulates the evolution of the species, Aquinas points out that the unborn human body passes through a number of intermediary and preparatory actualizations before it is ready to receive its soul from God.

In man, too, the nature of the final causation by which God moves the world is at last made manifest. Man is made to glorify God by contemplating and loving the divine handiwork, even as God himself contemplates it and finds it good. The whole movement and direction of his being is motivated by the love of God and proceeds toward the vision of God. As it is with man, so is it with the whole creation from the humblest actualizations of Matter to the sun and the other stars.

#### X. MINOR OPPONENTS AND CHAMPIONS OF AQUINAS

**Attacks on Aquinas.** Aquinas thought and wrote in an atmosphere of bitter dispute. He trod on many toes and aroused much determined opposition during his lifetime, which led shortly after his death to the temporary condemnation of certain of his views at both Paris and Oxford. The philosophic storm center his philosophy created was to persist for five hundred years, and was only finally dissipated when in 1879 Leo XIII directed that his teaching should be made the basis of all Catholic theological and philosophic teaching.

In the first place, he encountered the ill-will of the mystics, then chiefly centered in the Franciscan order. Bonaventure, for example, must have felt his ecstatic ardors chilled by Aquinas' assertion that hope of attaining the beatific vision in our earthly life is vain, and that here and now we had better cultivate the virtues and the perfections realizable in our present estate and be content to postpone mystical consummation of the love of God till after death.

In any case, the Franciscans took to the war-path and were joined

by some of the Dominicans. The Thomistic doctrines especially under attack were the denial of the plurality of substantial forms and the deprivation of the angelic intelligences of their matter and therefore of their individualities. In England the anti-Thomistic campaign was led by two successive Archbishops of Canterbury, Kilwardby and Peckham, and the condemnation at Oxford was largely their work.

**Siger of Brabant.** The attack on Aquinas was facilitated by the fact that despite his efforts he could not free Aristotle from the Neo-Platonic glosses of Averrhoes or prevent him from convincing some thinkers that the universe and Matter are uncreated and eternal and that there is no such thing as personal immortality. Thus Siger of Brabant, who was a contemporary of Thomas, defended the impersonality of the active intellect, the non-existence of personal immortality, the impossibility of a first cause, and the uncreated character of the universe. These doctrines he aired at Paris under cover of the "twofold truth," and succeeded in defying the university authorities and scandalizing the Church for some thirteen years. They were, however, eventually condemned.

Aquinas' advocacy of a philosophy that lent itself to such interpretations was utilized by his enemies to strike at him. The result was that the condemnation of Averrhoism was extended, at Paris, to the Thomistic view that Matter is the principle of individuation and, at Oxford, to the teaching among others that Matter is passive and the human soul a single entity.

**Defenders of Aquinas.** But Aquinas did not lack defenders. He had left many disciples who rallied to his support, and the aged Albertus Magnus hastened to Paris to defend his dead pupil. The condemnations, which were of only local authority and extent, fell to the ground, and his influence steadily increased. His prestige is nowhere better seen than in Dante's *Divine Comedy*, which not only sings his praises personally but solves on Thomistic lines every theological and philosophical problem it raises. Also, Dante draws largely upon Aquinas for his famous plan set forth in *De Monarchia* of pacifying the clashes between Pope and Emperor, which followed inevitably from the growth of the Papacy as a secular and a political power. The temporal and the spiritual power, he maintains, should be clearly distinguished. There should be a universal Empire, just as there is a universal Church, each with its well-defined province. The Emperor should be the supreme civil authority, the Pope the supreme spiritual authority. Neither should trespass upon the domain of the other.

Under such an arrangement the two, instead of incessantly quarreling, will cooperate.

**Raymond Lull and Godfrey of Fontaines.** The Thomistic philosophy produced not only ardent followers and ardent antagonists. It also gave birth to attempts to mitigate its more extreme and forthright positions and to reconcile it with other currents of thought. We find, for example, Raymond Lull (1235-1315) endeavoring to elaborate the principles and the ideas common not only to philosophy and the Christian revelation, but to Christianity and Mohammedanism, and from these to deduce logically the truth of the Christian position. More directly related to Aquinas is Godfrey of Fontaines (d. 1303) who, while accepting Thomism in principle, differs from him in many important points. He denies, for example, the distinction between the essence, or character, of a thing and its existence. He returns to the doctrine of substantial forms and maintains that an object, instead of possessing only one substantial form, possesses as many as the characteristics predicated of it. He also accepts the further consequence, with which we are already familiar, that the principle of individuation lies neither in Matter, nor in an Idea, or Form, of the individual, but in the different mixtures of substantial forms.

**Henry of Ghent.** Henry of Ghent (d. 1293), while agreeing with Aquinas in many respects, also differed from him so sharply in others as to make him the forerunner of Thomas' most redoubtable critic, Duns Scotus. He could not agree that the eternity of the universe was even thinkable. Matter, he felt, is not the principle of individuation. Since essence involves existence—and here he shares Godfrey's opinion—it is of the nature of Form to be individualized. And since it is also of the nature of Form to be what it is and nothing else, its particular manifestations must display a similar self-identity and difference from one another. Most important, however, are Henry's rejection of Aquinas' theory of the supremacy of the intellect over the will and his enthronement of the will as supreme. Whereas the intellect is passive, the will is originally active and acts without any determination whatsoever. To be sure, it must be presented with an occasion for its exercise, such as is supplied by a desirable object, but its activity is not caused or determined by the presence of the object. Freedom is, therefore, not self-determination to the good but absolute indifference or indeterminism. This teaching, like Henry's theory of individuation, leads us directly to Duns Scotus.

## Chapter XXIX

# DUNS SCOTUS

### I. LIFE

The most important and acute critic and opponent of Aquinas was Duns Scotus. Indeed in philosophical ability and acumen he was second, if not equal to Thomas himself, and ranks along with Roscellinus and Anselm and Abelard, as one of the great figures of the Scholastic period. He was born towards the end of Aquinas' life, it may be in the year of his death. Probably English, though perhaps Scotch or Irish, he entered the Franciscan order as a young man, studied and taught at Oxford, and went in 1304 to Paris. After spending four years there he left for Cologne where he died the same year (1308), cut off even more prematurely than Aquinas. Critical by nature, he fought with his contemporaries and criticized his predecessors, but always impersonally and often without naming them.

### II. DISTRUST OF REASON

From the mystical tendencies of the Franciscan order Scotus gets perhaps a certain distrust of philosophy, which leads him, on the one hand, to put theology entirely out of the reach of philosophic speculation by restricting it to the supernatural and to revelation, which admit of no discussion, and, on the other, to cast positive doubt upon the possibility of rationally demonstrating even the existence of God, the providential direction of the world, and the immortality of the soul. Reasoning to be conclusive must, he thinks, be *a priori*—a logical deduction from first principles of their necessary consequences. Reasoning *a posteriori* from effects or consequences to what causes them is inconclusive and of secondary importance. Hence proofs of the existence of God, of his providential government of all things, and of immortality, arguing as they do from effects to causes, cannot have the validity assigned to them by Aquinas. These questions belong entirely to theology, and the only certain light we have with regard to them is cast by revelation.

At the same time, Scotus holds that there are philosophical reasons for believing that God exists. The idea of God, of a complete and perfect being such as Anselm talked of, is not self-contradictory. It is therefore an idea possible for us to entertain, and is entertained by us as an idea possible of enactment. In having the idea of a perfect being, we are unable to find reasons why such a being should not exist. Hence, if such a being does not exist, the idea is both possible and impossible—which is a self-contradiction. Therefore the non-existence of God is self-contradictory. It follows that God exists.

But if such a being exists, he must be infinite. He must be an infinite cause to produce an infinity of effects; infinite intelligence to contain an infinity of intelligible Forms; infinite good to explain the endless aspiration of the will towards a final good.

### III. RELATION OF GOD'S WILL TO HIS INTELLECT

Still, the intelligible Forms compassed by the infinite intellect of God are not essential or primary elements of the divine essence. Neither are they models or archetypes which determine what the created universe shall be like. They are chosen and evoked in the same instant and by the same fiat of the divine will as brings the universe into being. The Forms or natures of things, then, are not prior to the things themselves. They are God's thoughts or knowledge of what he creates. His will that such should be his knowledge and that such should be the things he knows is a single act of volition.

It follows that, far from the divine reason or, for that matter, the divine goodness determining God's will and activities, as Aquinas had maintained, the divine intellect and benevolence are what they are because God chooses that they should be so. In other words, his will is not the expression of his character, his character is the expression of his will. So, too, his act of creating at one stroke the Form and the Matter of the universe and the individuals resulting from their union, is not motivated by any desire to realize what is already intelligible and good in his eyes, but by his simple "so be it." For nothing is good and intelligible in himself or in his creation except as he wills it. Finally, right and wrong have no absolute character apart from his volition. God does not will that things should be because it is right that they should be. They are right because he so wills them. He is governed by no moral law; the moral law—what shall be right and what shall be wrong—rests upon his "say-so."

But the divine will knows one master—the law of self-contradiction.

God does not will the impossible, as, for example, that squares shall be round. Nor can he will himself to be a mad intellect and to create a chaotic universe composed of incompatible Forms and things. Again he cannot without contradicting himself alter the commandment that his creatures shall have no other God but him. He cannot leave unpunished those who flout, and unrewarded those who love and obey, him.

#### IV. RELATION OF UNIVERSALS TO PARTICULARS

Since the Universal has no priority over the individuals that embody it but is created along with them, the universe comes into being as a system of Forms already enacted in their particular instances. In other words, it is of the very nature of the Form itself to be particularized. Tom, Dick, and Harry, then, are not due to an individuation by Matter or by a Form of man whose nature it is to be simply and purely a Universal. Nor are they the embodiments of Ideas of individuals existing in addition to the Form of man. They are due to the fact that it is inherent in human nature to be not only mankind but *men*. To be sure, to *think* of men is to think of mankind. For thought the individual always presents a universal aspect. But to *be* man, implies being *a* man. To possess *the* human form implies possessing *a* human Form, the Form of Tom or Dick or Harry. *Individuation, in short, is necessary to the complete expression of Form.*

As with man, so with all things. All essences and species are both universal and individual. As concepts which God's mind and our minds form of things they are Universals. In the things of which we form concepts, they are groups of individuals.

This implication of individual existence on the part of Forms and Universals is called by Scotus a "contraction" of essence. Tom, Dick, and Harry, for instance, are "contractions" of the human essence and Form. They concentrate and bring to a point the species and give to it the finishing touch and added perfection of their separate individualities.

"**Quidditas**" and "**Haecceitas**." But the distinction we make between individual "contractions" of the same essence cannot be reduced to the kind of distinction we make between things whose Forms and essences also are different. Tom, Dick, and Harry do not differ from one another in the same way as they differ from a litter of kittens. Nor do they differ from one another as different concepts the mind forms of Tom and Dick may differ. Their difference is of another sort, resting upon the fact that each individual "contraction" of a given

Form is necessarily *this* individual. Tom, for example, possesses not only *whatness* (*quidditas*) which makes him human, but *thisness* (*haecceitas*) which makes him Tom. But it is the nature of "this" to be "not that." Logically and formally, then, "this" is "not-that." Tom by virtue of being Tom is logically not Dick. In short, the difference between Tom and Dick is a difference not of *matter* (as with Aristotle and Aquinas) or of *essence* and nature (as in the case of Aquinas' angels) or of *individual forms* (Plotinus) or of mixture of *substantial forms* (Alexander of Hales and Bonaventure). It is of a new sort original with Scotus—the formal and logically necessary difference of any "this" from all "thats" or, in other words, of any one *individual "contraction"* of a given Form from all other contractions.

This kind of difference which Scotus calls "formal difference with respect to the thing" is not confined to the distinction between members of the same species. It is also the sort of difference that distinguishes God from his attributes, the absolutely indeterminate material substratum from its different formulations, the soul from her faculties. There, too, we have not merely difference of nature and form, such as exists between Universals, but the formal difference between this and that individual thing which distinguishes me from you. The universal application of this new "formalistic" principle is one of the distinguishing characteristics of Scotus, and is one of his chief claims to original thinking.

#### V. MATTER

Scotus also differs somewhat from Aquinas with regard to Matter. Thomas, following Aristotle, had regarded absolutely undetermined Matter as a limit, constantly approached as we strip away Form, but never reached. Everything *real*, he had said, is to some degree a formulation of Matter and an actualization of Potentiality. Scotus, though admitting that we never find pure Matter and potentiality devoid of all Form whatsoever, regards it as a real limit which God, if he chose to remove all Form, might create formless and void.

The first formulation of Matter takes the form of quantity, which is the basis of the multiple and extended character of the universe and of all locomotion and change. This prime Matter enters into all created beings, angels and human souls (who are many in number), as well as physical objects, and is one and the same in them all. Upon prime Matter rests a hierarchy of formulations in which each substance, constituted by the union of the Form of its species with Matter and

individuated according to the principle of "formal distinction with respect to the thing," provides the possibilities for still another step upward and onward. Finally the familiar Aristotelian pyramid terminates in its apex, man, whose bodily form prepares Matter for the reception of the immortal soul, which the Scriptures tell us he possesses, but whose existence is incapable of rational demonstration.

The pyramidal structure of the universe as a whole is repeated throughout its parts. Each individual substance comes to a point in the individual Form distinguishing it formally "with respect to the thing" from all other individuals, and it rests upon an ever-widening base of the Forms and levels of being that make it possible. All these supporting Forms show the characteristic "double-face" of actualizing the potentialities of the next lower level and of thus providing new capacities for actualization in the next higher Form.

#### VI. THE SOUL

When, however, Scotus reaches the human soul, he denies the Aristotelian doctrine of triple composition and of the Matter-Form relation of the three parts. The soul is one and indivisible, and cannot be identified with any of her faculties or activities. Her difference from them is the final "difference with respect to the thing" that distinguishes one object from another. Nevertheless, while she is in the body her intellectual activity of knowledge is conditioned by the faculty of sensation, and its objects are limited to the Forms enacted in the sensible world.

The Augustinian theory of knowledge as a divine illumination from above Scotus rejects entirely. *All* our concepts, however abstract, universal and lofty they may be, have a sensible foundation. Still, the intellectual faculty is intrinsically capable of entertaining the Forms of all being whatsoever, not only sensible but supersensible. It is, then, by God's will that our reason is limited to the sensible universe for the object of its meditations, and by God's will its scope might conceivably be enlarged. For that matter, though God has limited the field of the intellect, he has endowed it with certain guiding concepts and judgments that it cannot but use in thinking about what it perceives. For example, although the intellect cannot prove the existence of God, it must judge that he exists.



## VII. ETHICS

In the human soul, as in God, the will is prior to the intellect. Its choices are not determined by an imaged good. Indeed, we may, as Ovid remarked, see and approve the better course and yet deliberately choose and follow the worse. Our freedom is not freedom of self-determination, but freedom of power to choose undetermined by any motive, apart from what we are and apart from what we judge to be our good. The will must, it is true, have an incentive for its exercise in an object of desire recognized and known to be such, but what we shall find and recognize as desirable depends upon our will. We will to know this rather than that, and to consider this rather than that our good. Again the will is active and self-originating, whereas the intellect is receptive and gets its content from without. Finally, moral error, which lies in willing the wrong course, does not spring from misjudging what the right course is. Misjudging is itself a wrong choice of the idea or object to be contemplated or pursued, for which an absolutely undetermined decision of the will is alone to blame. We are as morally responsible for our thoughts as for our deeds, for what we want to do as for what we decide to do.

## *Chapter XXX*

# THE FALL OF MEDIEVAL SCHOLASTICISM

### I. GENERAL CHARACTERISTICS OF THE FOURTEENTH CENTURY

**Rise of Individualism.** The fourteenth century was an epoch of unrest and transition in which the human mind, still rooted in the medieval past, was becoming dissatisfied with the old order and was reaching out towards something new. In art, the century saw the substitution of flamboyant for perpendicular Gothic, and of a more highly individualized, personal and emotional sculpture for the calm, the impersonality, the austerity, and the symbolic character of earlier medieval work. In society it marked the breaking up of the corporate spirit and of the over-arching and all-encompassing community of thought, interest, and will, which not only had subordinated individuals to the two great Universals, the Church and the State, but had so knit together successive generations that it was natural and instinctive for each one to content itself with continuing or completing what its predecessors had begun, and with leaving what it had started or continued to others to perfect. The individual was now for the first time in many centuries beginning to feel self-sufficient and self-assertive, and to center his work and his achievement about himself rather than about institutional and corporate centers of gravity. This world, to be sure, was still overshadowed by the supernatural order, and the individual still looked to a life beyond the grave for the final fruition of his personal destiny. But we can see that it needed but another step for him to focus his interests upon his life on earth, and to demand and work towards self-fulfillment here and now. In short, the fourteenth century had almost but not quite made the Renaissance discovery of the capacities of the natural man and the possibilities of life before death.

**Emphasis on Practical Education.** In the educational field emphasis on quality was fast giving way to a passion for quantity. Universities multiplied themselves with great rapidity, each one of which found it paid to confer more and more degrees. Students frequented these

institutions for the purpose of getting, not an education, but a diploma, which they demanded in the shortest possible time, with the least amount of work, and with their eyes on the ecclesiastical job to which the master's degree in theology was a necessary preliminary. Naturally they were particularly irked at having to take the course in liberal arts, up to that time a requisite for specialization in theology. The pressure they brought to bear succeeded in shortening the period devoted to a liberal education and in enabling them to begin their professional work without sufficient general preparation and background. Even the University of Paris succumbed to these influences and became a degree factory. The result was the prevalence of superficiality, ignorance, lack of culture, absence of vision, and impatience with sound learning among university graduates.

**General Situation.** Politically speaking, the century was mediocre, save for the sudden sweep of the Black Death that decimated the population of western Europe. Everyone was at war with everyone else. But there were few great leaders and no spectacular and map-rending changes. Scotland brought to a final decision her long wars of self-preservation from the English, and England also lost all her French possessions save Bordeaux and Bayonne and Calais. The Swiss confederated and became, if not an independent nation, at least an autonomous portion of the Empire, and the Hanseatic League came into being. France lost Flanders and plunged into her Hundred Years' War with England, with its varying fortunes. And through internal discontent and insurrection both countries moved a step further towards the freedom of the individual. Meantime the Popes were in "Babylonish Captivity" at Avignon.

The effects of this general let-down were disastrous even in the higher circles of learning. Scholastically, it was a second-rate age, productive of little erudition and original constructive philosophic thinking. Its original thinking spent itself not in conceiving new systems but in attacking those that existed. The most Scholastic philosophy could do was to help demolish itself by its criticisms of both Aquinas and Scotus, while the persistence of Averrhoist pantheistic heresies and of mysticism and the increasing interest in the natural sciences completed its destruction. But the work of destruction produced two great mystics and great advances both in the formulation of scientific method and in the investigation and understanding of the physical universe. The critical and scientific achievements of the epoch were brilliant.

## II. NOMINALISM

**Extension of Roscellinus' View of Universals.** At the end of the eleventh century, we may remember, Roscellinus had attacked the doctrine that Universals and Forms have a real existence independent of the minds that entertain and the objects that enact them. Nay more, he maintained, they stand for nothing real in the objects themselves. Essentially individuals are unique, and the resemblances they bear to one another are accidental and superficial, and do not indicate the possession of a common nature. General concepts, then, entertained by the mind, are purely mental entities to which nothing in the external world corresponds.

By some historians of philosophy, as we saw, the doctrine of Roscellinus has been called Nominalism, but others, because Roscellinus apparently believed that the mind can abstract really *general* ideas from particular objects and entertain really *universal* concepts, have felt that the term should not be applied to him. Now, however, a truly "*nominalistic*" theory of the nature of thought and knowledge appeared upon the scene, which did away with any distinction between *conception* and *perception*, and reduced so-called abstract and universal ideas to terms of sensory experience. At the hands of this new teaching Universals as such simply vanished from human thinking as well as from every other form of existence. This new doctrine, totally destructive of Universals, is known as *Terminism*.

**Durand and Aureoli.** Its great exponent is William of Occam, but his way was prepared by Durand of Saint Pourçain, a Dominican, and Peter Aureoli, a Franciscan, both of whom taught in the first quarter of the century. Durand started as a Thomist, Peter as a Scotist, but their similar temperaments and the similar difficulties they found in their respective masters led them to almost identical conclusions.

Both were empirically and skeptically minded, and were distrustful of entities that they could not observe. Both, moreover, were free-thinking, not indeed to the extent of rejecting the supremacy of revelation over reason, but sufficiently so to assert the supremacy of reason over the purely human authority of the Fathers of the Church, and to demand complete freedom of thought in criticizing their teaching.

This freedom they proceeded to exercise. Plato and Aristotle, the Church Fathers, and the Scholastics, might, for all they cared, preach the reality of Universals and Forms. The fact remained that the only

reality with which we had any acquaintance was individual and concrete. We observe and deal with particular men and horses and chairs, never with abstract human or equine nature or chairness, either apart from individuals or in them. Universals, genera, species, substantial forms and the like exist only in the mind. But in the mind they exist only as a kind of composite and confused image produced by the overlapping of individual percepts, which records and merges the accidental resemblances in a blurred and vague, so-called "common concept." The more general the concept, the less specific the resemblances to which it is sensitive and hence the more indeterminate and meaningless its content and its outlines.

The same is true of so-called "sensible species" like the color red. We never see red, we see red objects. "Red" is just as much a composite image as "mankind" or "beauty." Only, since it simply records successive impressions of single points of resemblance, it is more clearly defined than vaguer images, like "being" or "matter" or "form."

**A New Theory of Knowledge.** If there are no such things as Universals, obviously it cannot be the function of the intellect to abstract them from the external world. Still, the problem of knowledge remains. If the intellectual processes of abstraction and classification and reduction to least common denominators, by which we discover, as we say, the natures of things and the laws governing their behavior, really lead us further away from the truth, what is knowledge and how can it be gained?

Peter Aureoli had his answer. The composite image called a concept is after all a representation of *things*. We do not perceive sensations, we do not think about perceptions. We perceive and think about the outer world, and our composite and long-range images are as immediately records of objective individual reality as our close-range ones. *Universals, in other words, are composite and superimposed sensations.* Between thought and sense-perception there is no difference of kind, but merely a difference of the degree of accuracy with which we observe the individual. What has heretofore been called knowledge leads us away from reality into pale abstractions and dulls and blurs observation instead of sharpening it. What we need is a method of knowledge that will rid itself of Forms and Universals, will concentrate upon the individual, and will find means of sharpening and giving more depth and precision to our observation of its being. Progress towards discovering such a method was made by William of Occam.

## III. OCCAM

**Philosophy as Inference from Observed Data.** Occam, an Englishman, was born on the threshold of the fourteenth century and died in 1350. He studied at Oxford, where he was influenced by the rapidly rising interest in science and mathematics and in their bearing upon philosophical problems. He shares the empirical tendencies of Durand and Peter Aureoli, and demands that philosophy shall concern itself with the observable and with inferences rigorously drawn from and confined to the observable. All true propositions either state or treat of what is self-evident, or are inferred from it and verified by it. We may, to be sure, make true propositions involving the relations between abstract ideas, as, for example, "God is good." But the truth of that proposition no more indicates that God exists than the truth of the proposition "the chimera has three heads" indicates that the chimera exists. The only true propositions stating the *existence* of their terms are those dealing with sensible experience or, as Occam calls it, with intuition.

It follows that we cannot explain the sensible world by supersensible entities like Forms or even God. For to establish the relation of cause and effect, the cause must be no less perceived than what follows from it. One sensible object can, then, so far as philosophy is concerned, be caused only by another sensible object. Moreover, since experience presents us only with particular things and never with Universals and Forms, always with men and never with mankind, the individual alone can be asserted to be real.

**"Occam's Razor."** Thus armed, Occam slashes at Aquinas and Scotus with what is known in the history of philosophy as *Occam's razor*. *Entities are not to be multiplied except as may be necessary.* Away, he cries, with universals, essences, substantial forms, and the like as principles of explanation and as metaphysical realities. Away, too, with the philosophies founded upon the assumption of their existence. Universals exist only in the mind as the last or family names of things, born of our habit of dealing with particulars *en masse* and of perceiving their superficial resemblances before distinguishing their individualities and calling them by the first names that designate what is real and ultimate in them. Standing as they do for any one of a number of individuals and for no one in particular, general terms express a confused "concept" of any particular object to which they are applied. Indeed the two names, general and particular, do not

designate different kinds of being, as the formalists maintain. They designate merely two aspects, one confused and "general," the other distinct and particular, of the same individual.

For example, the proposition "Tom is a man" simply states that an object, taken at a distance and confusedly to be something that might be either Tom, Dick, or Harry, turns out on closer inspection to be something that can only be Tom. Predicating the "man" of him no more adds anything to him that he did not already possess, or enlarges our knowledge of his real self, than does writing his family name Brown after Tom. As Tom Brown he is no more and no less of a person than he is as Tom, but Brown is the less intimate and revealing of the two terms and indicates less acquaintance with him personally.

**Convenience of Universal Names.** Nevertheless, "universal terms" have their uses. They are, to be sure, individual names and sounds, but they are names that may indicate and be substituted for indefinite numbers of individuals. They deliver the mind from the necessity of enumerating all the members of a group when referring to them *en masse*. For example, if I wish to indicate all the people in a city I do not have to read through the directory out loud. I can simply make the sound and utter the word "population."

Philosophically, too, the fact that we have "general" terms, or words that can be used to indicate indifferently large numbers of individuals, saves us a lot of bother. It makes it quite as unnecessary for the mind to entertain a mysterious concept or universal called "mankind" in order to grasp and deal with individual men, as it does for individual men to enact a mysterious form or essence of human nature in order to be human beings. Neither the mind nor the external world requires such supersensible instruments. All that exists in external reality is individual objects. All that exists in the mind is individual impressions of these objects more or less clearly distinguished from one another. All that the mind needs is two sets of names with which to indicate whether its experience of an individual is general and confused or particularized and distinct. In short, Universals of the Platonic-Aristotelian type are just so much metaphysical junk.

**Revelation the Basis for Belief in God and the Soul.** For all his destructiveness and his opposition to Aquinas and Scotus, Occam remained in his own opinion a good churchman. But he paid his price. Since we have no direct experience of the existence of God, or of one God rather than many, or of the divine attributes, or of the immortality of the soul, or of a first cause, or of a prime mover, or of the

finitude or the infinity of the universe in time and space, we can have no certain knowledge regarding them save that vouchsafed by revelation. For that matter, we have nothing but the authority of the Scriptures for the very existence of the soul. We experience, or "intuit," to be sure, things like sensations, emotions, pleasures, pains, desires, volitions, and processes of thinking, but we do not "intuit" any immaterial substance, any thinking or willing entity, behind them. The only possible *philosophical* attitude towards all these questions must be noncommittal and skeptical, and certainly must never go beyond assertions of seeming probability or improbability.

So, too, if it were not for revelation, we should be entirely in the dark with respect to the existence and nature of moral principles. We can no more reason out what is right and what is wrong than we can reason out what the divine nature is like. In the one case as in the other, the use of reason is of no avail. We must simply bow before the moral law as an expression of God's will. Good is good, evil is evil, because God wills them to be so.

Nor can we assert that the divine decrees express an immutable distinction between good and evil imbedded in the divine nature. Occam not only agrees with Scotus that all so-called "principles" are the unmotivated, arbitrary, and reversible wishes of the deity, but he goes beyond him in maintaining that God can flout even the law of self-contradiction and make it our duty to disobey the first two commandments and to hate the Lord our God with all our heart and all our soul and all our mind, and turn to other gods than him.

**Bradwardine and Mirecourt.** A more extreme exaltation of the divine will, even to the point of annihilating human freedom, was undertaken by Thomas Bradwardine (b. 1290, d. 1349), professor at Merton College, Oxford, and later Archbishop of Canterbury. The divine will not only determines what God shall be and do; it determines also what man shall choose, when he is, as we say, acting freely. To be compelled by God is perfect freedom. To be motivated by anything except the divine will, as, for example, the pressure of external circumstances, the solicitations of the senses, or even the representations of intelligence and reason, is to will under duress.

Bradwardine apparently saved the moral responsibility of the individual in these circumstances by attributing to him the power to listen or not to listen, as the case might be, to the voices of the world, the senses, and the intelligence, and to obey or not to obey the spontaneous, or divinely directed, welling up of pure, unadulterated volition within him. Another theologian, John of Mirecourt, scorned any such



reservations. We, he pointed out, have no say in the matter at all. We do not will, God wills in and through us. Therefore it is not we who sin, but God who sins in and through us. Hence sinning is not sinful.

#### IV. BURIDAN AND NICHOLAS OF AUTRECOURT

**Buridan and His Ass.** In contrast to those views, however, John Buridan (b. about 1300, d. about 1358), professor at the University of Paris, maintained that the will is subservient to the intellect and must necessarily choose what seems the better course of action. To illustrate his point, or to illustrate what was considered by his opponents its absurdity, either he or they invented the famous story of the ass that starved to death when placed midway between two equally attractive bales of hay. Buridan, however, did his best to extricate human beings from this situation by endowing the human will with the power of suspension of judgment till further deliberation had worked out a clearer and more reasoned picture of the truly better course. Furthermore, since deliberation never ends in a dead center, but always shows one alternative to be preferable, man is in no practical danger of becoming involved in the donkey's predicament.

**Autrecourt's Attack on the Concepts of Substance and Causation.** Of all the disciples that Occam's theories rallied to his banner, perhaps the most eminent was Nicholas of Autrecourt (d. about 1350), who also was a professor at Paris. He did his best to explode the two fundamental concepts of *substance* and of *cause and effect*, by arguing that both can be denied without self-contradiction. The seeming *production* of one event by another will not hold logical water. There is nothing in a given event—which is simply what it is—to necessitate an antecedent from which it springs or a consequence flowing from it. Hence there is no necessary link between any two events, and therefore no demonstrable *causation* of the one by the other. In that case, however, the concept of *substance* also goes by the board, since we mean by substance something that gives rise to the qualities it displays. For example, the substance of the apple is regarded as the *reason*, or *cause*, for its color, shape, taste, etc. But if no such connection is logically necessary, we cannot with any certainty argue from accidents and qualities to the existence of a substance underlying them.

All in all there is no more to *cause* and *substance* than what we directly experience. We experience the repetition of certain sequences, and on that basis are entitled to expect, or, in other words, to consider it probable, that the occurrence of certain events will be followed by

the occurrence of certain others. So, too, in the case of substances, we experience our own souls and what we call external objects. These we may call substances, if we like, remembering always that we have no warrant for asserting the necessary existence of anything underlying and backing our experiences.

It follows that there is no necessity of invoking God as a first cause and no possibility of proving his existence by so doing. Nor can we prove it from the necessity of a most perfect being, since so-called degrees of perfection are, logically speaking, simple differences of kind, and in the distinction or difference of "this" from "not-this" there is no more or less. A thing is simply "this" or "that." All things, then, being equally existent and equally themselves and nothing else, are equally perfect. Hence the existence of God, like that of an external world, and of substance, and causality, remains an undemonstrable proposition.

Both Autrecourt and Buridan have other interests and other teachings, which place them, one foot at least, in the rising tide of interest and progress in the natural sciences that in the fourteenth century was already seriously undermining the Scholastic edifice. We shall have occasion to return to them when we take up the history of this movement.

## V. THE MYSTICS AND THE AVERRHOISTS

We have now to note briefly cross-rips set up by the persistence of currents of thought that flowed almost equally at odds both with the orthodox Aristotelianism of the Church and with the attacks directed by the new science against Aristotle in general. The followers of Averrhoes' interpretation of Aristotle had never been silenced, and mysticism, with its ever-attendant leanings toward Neo-Platonism and pantheism, had more than held its own. The fourteenth century brought them into the open. Indeed, its opening was marked by an outburst of pantheistic mysticism in Germany, which cannot but remind us of Scotus Eriugena.

**Meister Eckhart.** Meister Eckhart, the originator of this mystical revival, was born near Gotha in 1260. After joining the Dominican Order, he took his degree in theology at Paris in 1302, and taught at Cologne till his death in 1327. His reaction to Aristotle and to Thomism was as violently negative in its way as that of Occam and his followers, and he turned back to Neo-Platonism and to Eriugena and Dionysius the Areopagite for his inspiration.

point, and that all motion and process are governed by such geometrical necessities as a straight line being the shortest distance between two points, the sphere being the primary form of radiation about a fixed point, and the most effective exertion of force being that exercised by the apex of a pyramid. We have here, it will be noticed, not only an analysis of qualitative difference and change into terms of quantity and movement in space, but implicitly at least, a substitution of mathematical necessity for purposes and final causes as the explanation of the nature and behavior of physical phenomena, including living bodies.

#### VII. ROGER BACON

**Revolutionary Views of Philosophy and Theology.** The great prophet, however, of modern science, who broke directly and emphatically with the authority of Aristotle, was Roger Bacon, a pupil of Grosseteste's, whose long life spanned almost the entire thirteenth century. His views were so revolutionary that, though he was a member of the Franciscan order and took the precaution of writing much in cipher, he was under suspicion of heresy and harassed by the Church throughout his whole career. Indeed, he spent fourteen years in prison, and was saved from a worse fate only by his sharp distinction between the light thrown by science and that vouchsafed by revelation, and by his devout adherence to Catholic doctrine so far as things supernatural were concerned.

Philosophy, too, he was careful to subordinate to theology. She was the forerunner of revelation in pre-Christian times and its handmaid and interpreter since the Incarnation. But this service is not servitude, since revelation and reason are in accord. Philosophy, like revelation, is a divine illumination of the mind, a ray of the Augustinian inner light. Indeed, it is the working within us of the active intellect, which Bacon regards as introduced into the soul from without, and as the presence in us of God himself.

To agree that the function of science and philosophy is to confirm the findings of theology does not, however, force us to agree that the scientific and philosophic methods and theories in vogue, as, for example, Aristotle's, are necessarily the correct ones. Nor does the supremacy of theology place her own methods and results beyond criticism. For that matter, theology is a grievous sinner. Not only does she trespass upon subjects that do not concern her, but she trespasses blindly, relying upon the less important sciences and ignorant

even of them. Again, within her own province she falls back upon the authority of glosses and interpretations rather than of the Scriptures themselves, and, when she does turn to them, she contents herself with the bad Latin translation of the Vulgate, too lazy and too ignorant to study them in the original tongues.

Theology must, then, reform herself by learning the languages in which her documents are written, and by founding her conclusions upon first-hand rather than second-hand knowledge of revelation. Philosophy is in the same fix. She is ignorant of her own history. Before she can talk intelligently of Plato and Aristotle, the Neo-Platonists, and the Jewish and Arabian philosophers, she must read them as they wrote, in Greek and Hebrew, Chaldee, and Arabic, and not in translations, and incorrect translations at that.

**The Necessity of Squaring Philosophy with "Experience."** But direct, untranslated acquaintance with philosophic and theological sources is only the first step. Much knowledge, to be sure, is gained by a study of the true history of theology and philosophy. But nothing could be more stultifying than blindly to accept the authority of the ancient philosophers and the Fathers of the Church, however correctly understood, before weighing their claims in the balance of intelligence and *reason*. History is still in progress. Aristotle, for example, may have been the last word in human knowledge and reason in his day, but that does not make him the last word for all future time. To regard him as such, to bow before him after the fashion of Hales and Albertus Magnus and Aquinas, is to doom the world to perpetual ignorance. For that matter, Hales' knowledge of Aristotle is so scanty that he does not understand what he is accepting as gospel truth, and Albertus and Thomas read their Aristotle with no sense of his historical context and no acquaintance with the progress of science since his day. It never occurs to them to check his observations and statements with observations of their own. It never occurs to them that his philosophy must be squared with *experience* before it can be accepted as authoritative.

Furthermore, their ignorance is colossal of the new instruments that knowledge now has at its command, notably the application of mathematics and the discovery that the passive observation of nature can be supplemented by deliberate *experiment*. On the importance of experiment Bacon cannot too strongly insist. It reveals truths that neither reasoning nor observation could ever discover of themselves. It is the only means of verifying scientific hypotheses in any field. It enables us to reconstruct the past and to calculate what will happen in the

future. All in all, then, unless reasoning is founded on up-to-date observation amplified by experiment, and employs the mathematical method in its operations, the mind, even be it the intellect of an Aristotle, can get us nowhere.

**Father of the Experimental Method.** Such was Bacon's vision, recorded in his *Opus Majus*, his *Opus Minus*, his *Opus Tertium*, and the *Liber Sex Scientiarum*. Unfortunately we have only a part of the *Opus Minus* and the *Opus Tertium* and fragments of the *Liber*, so that our knowledge of this vision in its completeness is far from adequate. It was not, indeed, a sudden or a clean break with the past. The discontent it voiced with things as they stood was already in the air. Curiosity regarding nature was everywhere abroad. The insistence that a knowledge of mathematics is an indispensable condition to understanding the universe had already been suggested by Grosseteste. But Bacon's comprehension of the possibilities of mathematics and of its fundamental role, not only in science but in philosophy, goes far beyond Grosseteste's position. His appeal to *experience* as the origin and justification of all philosophy and science, and as the final court before which their claims to validity must be tried, is novel. And his discovery that experience can be deliberately enlarged and deepened by *experiment* is original with him. He is the first thinker in recorded history to use the phrase "experimental science," and may be regarded as the father of the experimental method.

**Father of Invention.** In a sense, too, we may regard him as the father of European *invention*. To be sure, the discoveries attributed to him, as, for example, the telescope, the burning glass, spectacles, and gunpowder<sup>1</sup> are doubtful, and in any case were not followed through. But the *spirit* of invention was there. In the Middle Ages, it is fair to say, man had submitted to nature as he found her. It had not occurred to him that he could control her and, by harnessing her to his uses, improve his natural lot. Or when the possibility of such control did enter his mind, it appeared as magic, and all attempts to actualize it were promptly condemned by the Church as an invocation of Satan's aid against God's purposes and as the practice of a black art. But now the discovery that nature could be manipulated at will by experiment and thus made subservient to human ends was sure to be followed by the discovery that her forces could be mastered and her ways altered by man to suit his preferences. This awakened sense of power over nature

<sup>1</sup> Gunpowder and many other things commonly regarded as western inventions were in use in China before Europe "invented" them.

went hand in hand with the sense of the self-sufficiency and dignity of the natural man, which was one of the great characteristics of the Renaissance. Bacon shares this feeling, and in this, as in other ways, his face is turned towards the dawn of a new day.

#### VIII. THE PROGRESS OF SCIENCE

**Occam's View of Motion.** We can easily understand how great an impetus the scientific movement must have received from the teachings of Occam, and, conversely, how readily his followers must have come under its influence. So we shall not be surprised to find both Buridan and Nicholas of Autrecourt caught in and contributing to its current. Occam himself had been interested in natural phenomena, and part of his criticism of Aristotle had been devoted to the latter's contention that the existence and nature of movement demands the intervention and guidance of external causes. To this doctrine he opposed the theory that bodies simply *are* in motion of themselves and that it is the nature of motion to continue indefinitely. Given, then, the mere fact of motion, no external cause is needed to keep bodies moving or to determine their trajectories.

**Buridan's View of Motion.** Buridan carries the analysis of motion still further, concerning himself particularly with the movement imparted by one body to another, with the observed tendency of bodies so moved to lose their motion and come to rest, and with the acceleration of falling bodies. These phenomena he explained by trying to establish a relation between the persistence of movement and the mass and velocity of the moving object, and by noting the retarding influence of weight, and of the friction of the medium through which the body is passing upon the initial impetus with which the body is moved. Applying his conclusions to astronomy, he pointed out that the heavenly spheres stood in no need of unmoved movers to keep them moving. Free as they were from the brakes of friction and weight, a single, initial act by God was enough to set them whirling world without end.

**Autrecourt's View of Physics and Immortality.** Nicholas of Autrecourt dealt more particularly with the nature of the world-stuff, and supplemented his rejection of causality and substance as conceived by Aristotle with a frank acceptance of the Democritean and Epicurean atomism, hitherto anathema to the Church. All change, he maintains, may be reduced to change of spatial position. Growth and alteration are not, as Aristotle taught, due to the coming and going of different

Forms in an underlying substratum. They are due to the spatial movement and the shifting spatial arrangements of the atoms of which bodies are composed. It is their coming together that "forms" a body, their varying relations that alter it, their dispersion that destroys it. Incidentally, his teaching that light is material and corpuscular and is transmitted, not instantaneously, but at a certain speed, was quite at variance with the accepted doctrine of the day and anticipatory of modern science.

His views on immortality were equally defiant of ecclesiastical convention. The soul, or rather the two "spirits," intellectual and sensible, of which she is composed, do indeed survive death. But they get their moral characters from the atomic arrangements in the bodies with which they have been associated. After death they will be rewarded or punished, as the case may be, by being united with new aggregations of atoms congenial to their good or evil tendencies and conducive to their salvation or damnation. This theory Autrecourt advances tentatively. It is, he remarks, as reasonable as any other theory of immortality heretofore advanced, and may be held provisionally till something better turns up. The Church considered these views a "foxy" subterfuge and condemned them accordingly.

**Albert of Saxony's Study of Physics.** Another of these ecclesiastical *enfants terribles*, wise beyond their years, that the fourteenth century produced is Albert of Saxony (d. 1390), rector of the Universities of Paris and Vienna and bishop of Halberstadt. Albert carried on Buridan's work by further analysis of the nature of weight and of the space-time aspects of velocity. Every object, irrespective of its shape, possesses, in addition to its geometrical center, a point within it towards which its bulk tends to press and about which therefore it tends to cohere. Hence all things on earth tend to press towards the earth's center of gravity and to unite their centers with its. They also resist every effort to separate them from that center, and, as soon as the resistance is overcome, immediately return towards it. In this way we explain weight and the habit bodies have of falling. So far as the problem of velocity is concerned, Albert worked out its proportional relation to the space traversed by the body, but hesitated with respect to the time equation.

**Mathematics of Nicholas Oresmus.** Greater than any of his predecessors was Nicholas Oresmus, bishop of Lisieux (d. 1382). To him we owe the beginnings of analytical geometry and the first plottings of curves and graphs. Taking up the unfinished work of Albert of Saxony, he established the space-time ratio in motion, formulated the

movement of falling bodies with mathematical exactitude, and equated uniform acceleration with uniform speed. He also argued for the view, now becoming more general, that the earth turns upon its axis, and that the heaven of fixed stars is stationary.

From the formidable array of the opponents of Thomism, and for that matter of Scotism, we must not conclude that these systems collapsed or even tottered under the battering they received. Both Aquinas and Duns Scotus had able supporters, who gave almost as much punishment as they took in the free-for-all theological scrimmage, and Thomism, far from being knocked over the ropes, was, at the end of the fourteenth century, still the fittest of all the fighters in the ring.

#### IX. GENERAL ACHIEVEMENTS OF THE FOURTEENTH CENTURY

The year 1453, the year in which Constantinople fell into the hands of the Mohammedans, is conventionally regarded as the date that announces the end of the Middle or "Dark" Ages and the beginning of the Renaissance. But we can now see that any such sharp line of demarcation between the two epochs is artificial, and that the Middle Ages were not dark but abounded in intellectual activity. Nor, even granting their darkness, did the night disappear and the new day dawn with tropic suddenness.

For the fourteenth century is as much a prologue to the Renaissance as it is an epilogue to medieval thought. It was astir with the naturalism, scientific, moral and philosophical, that was to color and direct the thinking of the next two centuries. It was groping towards the great discoveries in astronomy and physics which were so soon to be made and which were so profoundly to influence the new speculation. It had prepared their advent and their acceptance by breaking in large measure the shackles of the past. It had sown the seeds of doubt respecting the necessity of reckoning with anything supernatural in the conduct and the salvation of human life. It had asserted the power of the unaided human reason to work out satisfactory solutions of the manifold problems with which humanity was confronted. It had continued and emphasized the thirteenth century's ecclesiastical interest in Greek and Arabic and Hebrew, and had thus prepared the way for the recovery of the secular treasures of antiquity and for the devotion they were so soon to inspire throughout the western world. In the voyages of Marco Polo it had embarked upon the explorations that not only radically altered man's conception of the face of the earth and the



westerner's illusion of the uniqueness and primacy of his particular civilization, but, in conjunction with the new astronomy, necessitated a reweighing of the place and importance hitherto assigned to humanity in the universe. We enter, then, the Renaissance, not with our faces, but our backs turned towards the rising sun of the modern world.

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 Heraclitus—"flourished"—*circ.* 500 B.C.  
 Parmenides—"flourished" between 500-450 B.C.  
 Anaxagoras—b. *circ.* 500-428 B.C.  
 Zeno—"flourished"—*circ.* 475 B.C.  
 Leucippus—"flourished" between 500-450 B.C.  
 Empedocles—*circ.* 490-435 B.C.  
 Melissus—flourished *circ.* 440 B.C.  
 Protagoras—481-411 B.C.  
 Gorgias—*circ.* 483-375 B.C.  
 Socrates—469-399 B.C.  
 Democritus—b. *circ.* 460 B.C.  
 Antisthenes (founder of the Cynic School)—*circ.* 444-365 B.C.  
 Aristippus (founder of the Cyrenaic School)—*circ.* 435-356 B.C.  
 Plato—427-347 B.C.  
 Aristotle—384-322 B.C.  
 Pyrrho (founder of the Skeptical Movement)—*circ.* 360-270 B.C.  
 Zeno (founder of Stoicism)—*circ.* 350-258 B.C.  
 Epicurus (founder of Epicureanism)—342-270 B.C.  
 Arcesilaus (Skeptic)—316-241 B.C.  
 Chrysippus (Stoic)—282-209 B.C.  
 Carneades (Skeptic)—214-129 B.C.  
 Panaetius (Stoic)—*circ.* 180-111 B.C.  
 Posidonius (Stoic)—*circ.* 130-50 B.C.  
 Cicero (Eclectic)—106-43 B.C.  
 Lucretius (Epicurean)—95-52 B.C.  
 Philo (Jew, influenced by Platonic tradition)—b. *circ.* 20 B.C.  
 Seneca (Stoic)—4 B.C.-65 A.D.  
 Aenesidemus (Skeptic)—flourished probably some time between 50 B.C.-100 A.D.  
 Plutarch (Neo-Pythagorean)—*circ.* 46-120 A.D.  
 Epictetus (Stoic)—b. *circ.* 60 A.D.  
 Fourth Gospel (beginning of Christian philosophy. Platonic influences)—written *circ.* 100 A.D.  
 Marcus Aurelius (Stoic)—121-180 A.D.  
 Clement of Alexandria (Christian)—b. *circ.* 150 A.D.  
 Tertullian (Christian)—*circ.* 155-222 A.D.  
 Origen (Christian)—*circ.* 185-254 A.D.  
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 Irenaeus (Christian)—flourished between 130-202 A.D.  
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 Augustine (Christian)—354-430 A.D.  
 Proclus (Neo-Platonist)—*circ.* 410-485 A.D.  
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Closing of the Schools of Athens.  
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Mohammed (founder of Mohammedanism)—*circ.* 569-632.

John Scotus Eriugena (Christian)—*circ.* 800-877.

Avicenna (Mohammedan) — 980-1036.

Anselm (Christian)—1033-1109.

Avicbron (Jewish)—flourished *circ.* 1050.

Roscellinus (Christian)—*circ.* 1050-1122.

Abelard (Christian)—1079-1142.

Averrhoes (Mohammedan)—1126-1198.

Maimonides (Jewish)—1135-1204.

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Albertus Magnus (Christian. Aristotelian)—1206-1280.

Roger Bacon (Christian)—*circ.* 1214-1294.

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Bonaventure (Christian. End of Platonic supremacy)—1231-1274.

Thomas Aquinas (Christian)—*circ.* 1225-1274.

Meister Eckhart (Christian)—*circ.* 1250-1329.

Duns Scotus (Christian)—*circ.* 1274-1308.

William of Occam (Christian)—d. *circ.* 1349.

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The Italian Renaissance. Beginning of liberation of philosophy from servitude to Christian theology. 1453.

## GLOSSARY OF COMMON TERMS<sup>1</sup>

**ANALYTIC JUDGMENT.** A proposition in which the predicate is logically implied by the subject to which it is attributed, and therefore gives us no new information about the subject; as for example, "The radii of a circle are of equal length." (The radii of a circle *must* of their very nature be of equal length. If they were not, they would not be the radii of a *circle*, but of an ellipse or an oval.) Opposed to *synthetic judgment*, q.v.

**ANTINOMY.** Generally speaking, any real or apparent conflict between conditions producing the same result, or between the consequences of two equally demonstrable and convincing lines of reasoning. Used by Kant of the contradictions that arise from our ability to demonstrate with equal cogency that the universe must be both finite and infinite, caused and causeless, wholly determined and yet admitting of freedom, or the like.

**A POSTERIORI.** Used of knowledge and principles regarded as derived from or dependent upon experience. Opposed to *a priori*, q.v.

**A PRIORI.** Used to designate knowledge and principles of thinking that are not derived from experience and cannot be explained by experience, even if their only application is to experience. Cf. The Kantian categories. Such knowledge and principles are logically, but not temporally and psychologically, *prior* to experience. Opposed to *a posteriori*.

**ARCHETYPE.** The original, or model, of which other things are regarded as the copies; as, for example, the Platonic Ideas and the ideas of things existing according to Berkeley in the mind of God.

**CATEGORY.** Term applied to the widest and most universal concepts in which the mind habitually docket its thoughts and judgments. Used by Kant to designate the *a priori* forms under which all experience must be subsumed by the understanding, if it is to be rendered intelligible and is to be understood.

**CONTINGENT.** Used to describe anything that can be conceived equally well as existing or not existing. Employed of future events whose

<sup>1</sup> The following definitions are based upon *Vocabulaire de la Philosophie* by André Lalande. Felix Alcan, Paris, 1932.

occurrence, though regarded as possible, is not regarded as necessitated and determined by the present existent situation. Used also of coincidence as contrasted with cause and effect, and of logical propositions whose truth does not rest upon the necessities of rational thinking, but must be verified in and by experience.

**COSMOLOGICAL ARGUMENT (PROOF).** Argument for the existence of God, founded upon the necessity of assuming a cause and reason for the existence and the nature of the universe.

**COSMOLOGY.** Study of the constitution of the sensible universe as a whole and of the totality of the general laws that sum up its behavior. The term *rational cosmology* is used by Kant to designate the totality of the questions concerning the origin and nature of the world regarded as a reality.

**DEDUCTION.** The process by which the mind passes from one or more propositions, accepted without denying or affirming their truth, to the conclusion logically implied in and necessitated by them. Used by Kant to designate the a priori applicability of the categories to sense experience, and called by him *transcendental* in order to oppose it to a discovery of the categories based upon the observation of experience.

**DISCURSIVE.** A term applied to *processes* of thinking which reach their conclusions step by step through a series of intermediary operations.

**DUALISM.** In its widest usage applied to any theory that in any field of investigation reduces the variety of its subject-matter to *two* irreducible principles; as, for example, the natural and the supernatural, good and evil, will and intellect. Used in metaphysics of any system that reduces the whole universe to two such principles, as, for example, the Platonic Ideas and Matter, Mind and Matter, the Determinate and the Indeterminate.

**EMPIRICISM.** The doctrine that all ideas and categories are derived from sense-experience (a posteriori), that knowledge cannot extend beyond experience, and that all knowable Reality must be either actually experienced or capable of being experienced. Opposed to "innate ideas," a priori structures of the mind and forms of thinking, entities, material or immaterial, transcending experience, and the pretensions of reason to discover truths and beings existing outside and apart from sense-experience.

**EPI-PHENOMENALISM.** The teaching that consciousness is a mere accessory and accompaniment of physiological processes, whose presence or absence makes no difference to these processes, and whose activity

is powerless to interfere with them and to influence them in any way whatsoever.

**EPISTEMOLOGY.** Used loosely as synonymous with "theory of knowledge," and therefore as a designation of the study of the nature, possibilities, and limitations of the activity of knowing. Employed more correctly of the critical study of the principles, hypotheses, and results of the different sciences, with a view to determining their logical grounds, their value, and their objective implications.

**ESSENCE.** Used in metaphysics to designate that which makes a thing what it is and nothing else, in contrast with the qualities, or *accidents*, which attach superficially and for the time being to the thing and may be detached from it. Contrasted also with the *existence*, or factual being and "thereness" of a thing in and for itself, or its presence as an *experienced* fact. By some the essence of a thing is lodged in that which it shares in common with other things of the same sort (e.g., Plato); by others in that which makes it individual and concrete (e.g., Aristotle).

**ETERNITY. ETERNAL.** Used loosely as a synonym for "everlasting duration," but more specifically and properly for that which exists outside of and without reference to duration, and is therefore *timeless*. For example, the Platonic Ideas, the Christian God, the Pythagorean proposition, and any absolute and universal truth, do not "go on" and continue and endure in time. They exist or subsist in a manner that the existence or the non-existence of time and duration does not affect.

**EXISTENCE.** Used of the factual being and "thereness" of a thing. either



and exercise, and require no other reasons of any sort to account for them.

**FREE WILL OF SELF-DETERMINATION.** Used of such decisions and behavior that the agent regards as determined by no compulsion of external forces, but simply by his own essential nature, or *self*. This *self* may be identified with reason and reflection and pursuit of the good, in which case ignorance, impulse, folly, passion, and the pressure of the instincts appear as external constraints upon volition and behavior expressive of the true self. But to establish moral and legal responsibility it is sufficient to show that the agent is not forced by anything *outside himself* to act as he does.

**IDEALISM.** Used metaphysically of any system that reduces all existence to terms of thought, whether of a single, absolute thinker (absolute, or monistic, idealism) or of a plurality of individual thinkers (pluralistic idealism; personalism).

**INDUCTION.** The process by which the mind proceeds from the observation of particular cases and from propositions of restricted scope to a single proposition or a smaller number of propositions which cover and imply the particular cases and propositions in question. For example, the laws of physics are "induced" from the observation of the behavior of physical phenomena.

**MATERIALISM.** Doctrine that all the aspects of the universe, including human life, can be reduced to and explained in terms of matter in motion. The term is also applied to systems that, although they regard consciousness as irreducible to terms of physical energy, still consider it dependent upon matter for its existence and find its processes and successive states explicable only when correlated with physiological processes and thus submitted to the laws governing physical motion and energy.

**MECHANICAL.** Used of any theory that dispenses with occult powers, *design, purpose, final causation and determination* of the part by the whole, and substitutes for them determination by invariable antecedent conditions as the principle according to which the occurrence and behavior of phenomena are to be explained.

**METAPHYSICS.** In its popular and general sense, investigation of the essential and absolute nature of Reality as a whole. Original meaning, "what comes after physics," and used originally of the works of Aristotle that followed his *Physics* in the collection of his works made by Andronicus. Used by Aquinas to designate knowledge of *supernatural* entities; by the Cartesians, of *immaterial* entities; by Kant, of constructive attempts to know the nature of things as they

are in themselves, and of theories regarding objects of faith, like God, freedom and immortality; by Bergson and other intuitionists, of the immediate acquaintance with the Real given by direct intuition of its nature, as contrasted with the falsifications of the nature of the Real by the intellectual processes.

**MONISM.** Term applied to any philosophic system that regards the universe in all its aspects as reducible to, and the representation of, a single principle, as, for example, mind or matter or energy or "the unconscious."

**MYSTICISM.** The doctrine that the nature of Reality is *ineffable*; that is, inaccessible through either the senses or the intellect, indescribable in any of the terms and categories at the command of ordinary human consciousness, and approachable only in and through a special state of *ecstasy* which transcends every form and activity, sensible, emotional, intuitive, volitional, and rational of normal human experience. In this ecstasy all sense of separateness, apartness, and difference of the self from the nature of the Real disappears, self-consciousness is obliterated, and the individual is either actually merged and made one with the Real, or engrossed in a beatific vision of it in which the distinction between subject and object, though still existent metaphysically, is no longer experienced.

The term is also applied to the special ascetic discipline regarded as a prerequisite to the attainment of *ecstasy*.

In a lower and more popular sense, it is also frequently extended to such attitudes and beliefs as rely upon ordinary human feeling, intuition, and experience of volition, rather than upon empirical observation and reasoning, as guides to the nature of the Real.

**NATURALISM.** The teaching that the universe needs no supernatural origin or explanation, but is self-explanatory or self-existent; that its behavior is not teleologically explicable by final causes and purposes; that human life and behavior are in no way exceptional and outside the course of natural events, and are to be explained by the same principles as obtain throughout the rest of nature; and that human values, moral ideals, and conduct are determined by the organic structure and needs characteristic of the human species.

**ONTOLOGICAL ARGUMENT (PROOF).** Argument for the existence of God based upon the logical analysis and definition of his nature. The idea of a perfect being, it is argued, is necessarily the idea of an existent being, since a being that lacked existence would not be perfect. Reason demands the idea of an *ens realissimum*, of a complete, finished, sum total of being, lacking in nothing. Therefore logic and

reason demand that this idea shall have enacted existence. Used by Anselm. First so called by Kant.

ONTOLOGY. Used generally as synonymous with metaphysics. Original sense, the science or knowledge of *being* as such.

PANTHEISM. The teaching that God and the universe are one and the same thing. Pantheism may be idealistic (Hegel, Fichte) or materialistic (Holbach, Diderot) or naturalistic (Spinoza) or moral (the Stoics) or mystic (Plotinus, Scotus Eriugena, Bruno) according to the view taken of the essential character of the Real.

PARALOGISM. False reasoning. Employed by Kant to designate the incorrect reasoning by which the substantial, simple, and personal character of the soul is "demonstrated," and by which Berkeley's equation of *existence* with perceiving and being perceived is "established."

PHENOMENON. That which appears to consciousness. That which is perceived. Used sometimes of the "brute," fluid content of consciousness, sometimes of the facts, objects, and events into which this content coagulates. Used by Kant to designate any "object of possible experience"; that is, everything that appears under the forms of space and time and in the ways determined by the categories of the understanding.

PLURALISM. Used of any system according to which Reality is composed of *many* individual, independent, ultimate constituents, which cannot be reduced to terms of one another, or to aspects of some single common principle underlying them. Cf. Herbart, Lotze, James, Schiller, and others.

PSYCHO-PHYSICAL PARALLELISM. The doctrine that every physical event is accompanied by and corresponds to a psychical event and *vice versa*. (Cf. Spinoza.) Used more particularly of the teaching that every psychical event accompanies and corresponds to a physiological event (but not that every physical event has necessarily a psychical concomitant). The relation between the two series of events is not regarded as causal, but simply as concomitant. Mental states do not cause physical states, or *vice versa*. They merely accompany each other.

REALISM. Most generally used at present of any system that denies the possibility of reducing the universe to terms of mind and thought, and that maintains that something would still exist, if all consciousness whatsoever was extinguished. From this point of view experience and knowledge are of an *external independent world*. Used also of the Platonic doctrine that the Ideas are independent of and

more real than sensible objects, and of the Scholastic teaching derived from Plato, that universals exist independently of the particulars that enact them.

**SOLIPSISM.** A form of idealism that considers any individual thinker justified in maintaining that he and his experiences alone exist, and that all other seeming centers of consciousness are merely figments of his own conscious activity, like the dreams in which other people figure. This doctrine, it is argued, cannot be disproved, and is the only *logical* conclusion that can be drawn from the reduction of so called external and objective reality to terms of consciousness and experience.

**SUBJECT.** That of which qualities are predicated and in which they are supposed to inhere. Used also more particularly, and as contrasted with *object*, of that which experiences and thinks and unifies the multiple and varied content of consciousness into an objective world of *things*.

**SUBSISTENCE.** Used by some modern philosophers of the kind of being possessed by universals, logical propositions, formulae, types, laws and the like, as distinguished from the *existence* possessed by concrete particular objects. Used originally and more generally of the kind of being attributed to substances as contrasted with that of qualities and accidents, and of the duration and persistence of a thing despite the change and disappearance of its qualities.

**SUBSTANCE.** That which exists in and by itself and not as a modification or relation of anything else. That is, a thing which remains as the permanent and self-identical support of the changes and of the different and successive qualities by which the thing is modified. Cf. Spinoza and Locke.

**SUBSTRATUM.** Used frequently as a synonym for *substance* in the sense of a permanent, self-identical support for modes and accidents and changes. Cf. Locke and Berkeley. Not synonymous, however, with *substance* in the sense of that which exists in and by itself.

**SYNOPTIC.** Used to designate an act of thought or point of view in which a whole and all its constituents are grasped and seen together simultaneously in their entirety and in their necessary connection with, and implication of, one another. Cf. Spinoza's vision "under the aspect of eternity."

**SYNTHETIC JUDGMENT.** A proposition in which the predicate is not necessarily implied by the subject to which it is attributed; as, for example, "The orbits of the planets are ellipses." (There is no logical reason why planetary orbits should not be circular instead of ellip-

tical. Hence their elliptical form is not logically implied.) Opposed to *analytic judgments*, q.v.

**SYNTHESIS.** The operation and result of piecing together comparatively simple elements into larger and more complicated wholes. Used by Hegel and his followers of the fusion of opposed ideas (thesis and antithesis) in a new "higher" idea or proposition in which their contradiction is overcome and their essential identity is revealed.

**TELEOLOGY. TELEOLOGICAL.** Descriptive of attempts to explain events not by their antecedents but by their results and purposes; that is, not by efficient but by final causation. The explanatory purpose may be regarded as external (argument from design) or internal (biological ends; entelechies). Used also of attempts to explain the nature and arrangement of the parts by the whole of which they are the constituents; as, for example, in the case of organic bodies. Cf. Kant.

**TRANSCENDENTAL.** Used by the *Scholastics* of attributes even more general than the Aristotelian categories, as, for example, unity, truth, goodness. Used by *Kant* of the a priori categories and other structure of the thinking apparatus, and also to designate attempts to extend the categories and procedures valid for human experience to the world of things-in-themselves and this makes them *transcend* experience. Used also of all systems that consider experience to be governed by a priori forms and principles. Name applied to the Concord school of which Emerson was the chief representative.

**TYCHISM.** Term suggested by C. S. Peirce for the theory, expounded by him, that *absolute chance* exists and makes itself evident in the world-process. In other words, not only does the word "chance" stand for our ignorance of the causes of many things, but many events actually *have no causes*, and *happen for no reason whatsoever*. Peirce considered biological processes to be obviously *tychistic* in character.

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